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(54) **TARGET SEQUENCE OF RNA VIRUS AND USE THEREOF**

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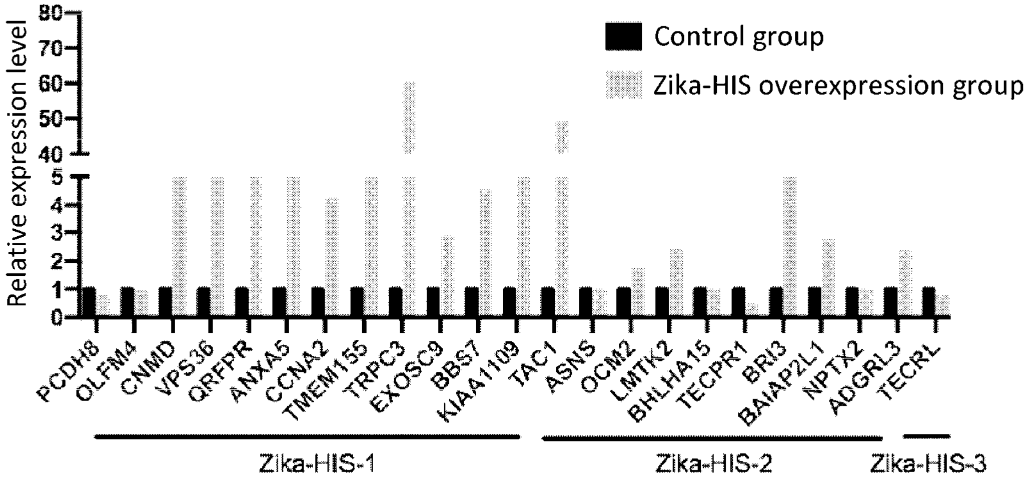
(57) **ABSTRACT**

The present invention provides a target sequence of an RNA virus. The target sequence is a nucleic acid sequence fragment in the gene sequence in the RNA virus containing 20-40 bases and having not less than 95% similarity to genome sequence of human or related species such as livestock and poultry. The above-mentioned target sequence of the RNA virus is selected from SEQ ID NO. 1 - SEQ ID NO. 615. The present invention also relates to a primer composition for constructing the above-mentioned target sequence, biomaterials such as antisense RNA related to the above-mentioned target sequence, and related uses such as design of a vaccine lacking the target sequence. The virus fragment with the above-mentioned sequence constructed in the present invention has the function of interacting with human genomic DNA and is similar to viral miRNA. Moreover, the effect of overexpression of the target sequence of the RNA virus on the expression level of surrounding genes is verified, and a new concept that the above-mentioned target fragment is an important pathogenic substance of the RNA virus is proposed. The above-mentioned target sequence has important application value for the detection and diagnosis of RNA viruses, drug screening, as well as the treatment of diseases caused by RNA viruses and the design/optimization of vaccines and methods.

Specification includes a Sequence Listing.



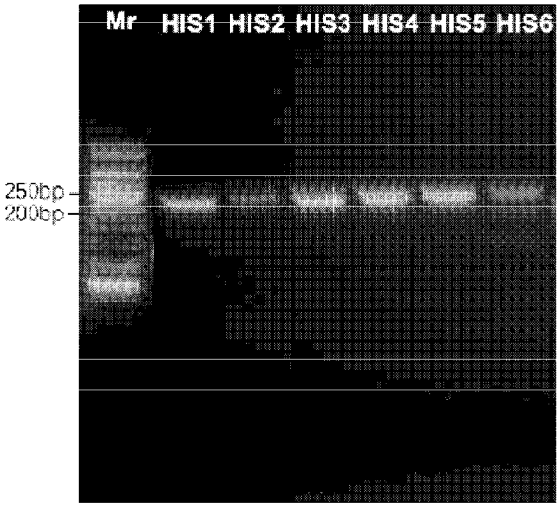


FIG. 1

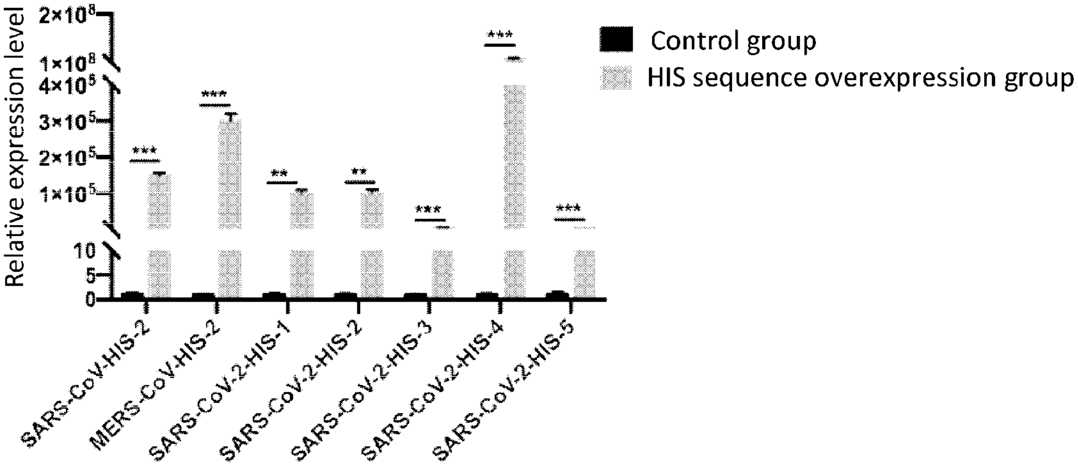


FIG. 2

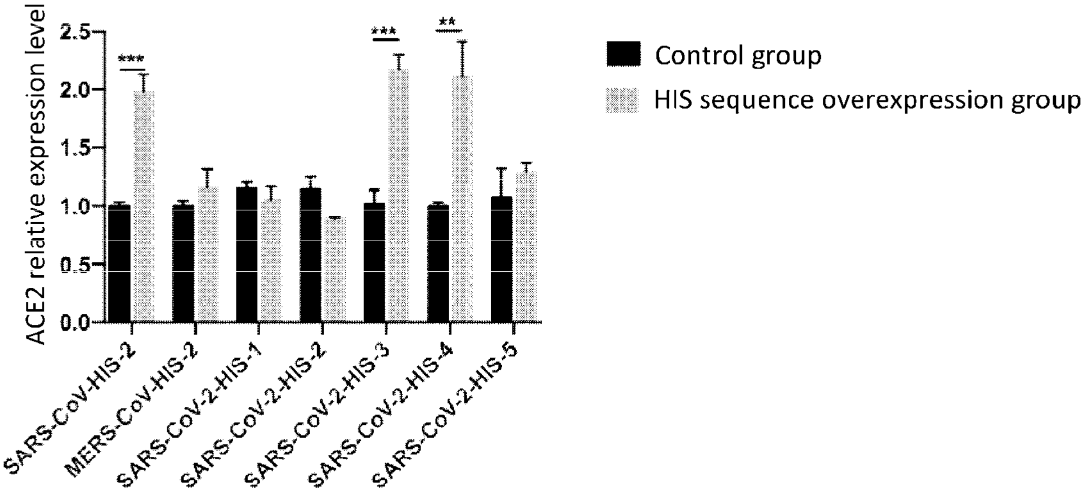


FIG. 3

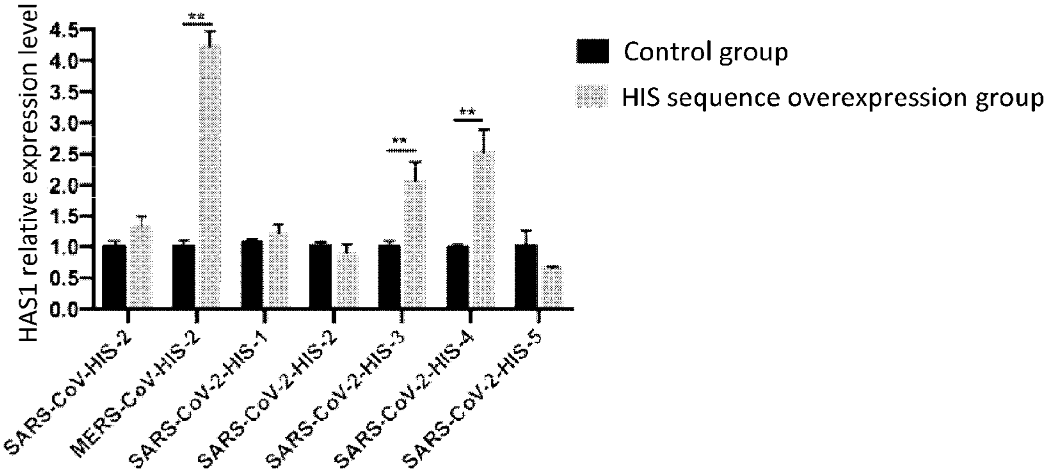

HAS1 relative expression level
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
**
**
**
SARS-CoV-HIS-2
MERS-CoV-HIS-2
SARS-CoV-2-HIS-1
SARS-CoV-2-HIS-2
SARS-CoV-2-HIS-3
SARS-CoV-2-HIS-4
SARS-CoV-2-HIS-5
Control group
HIS sequence overexpression group

FIG. 4

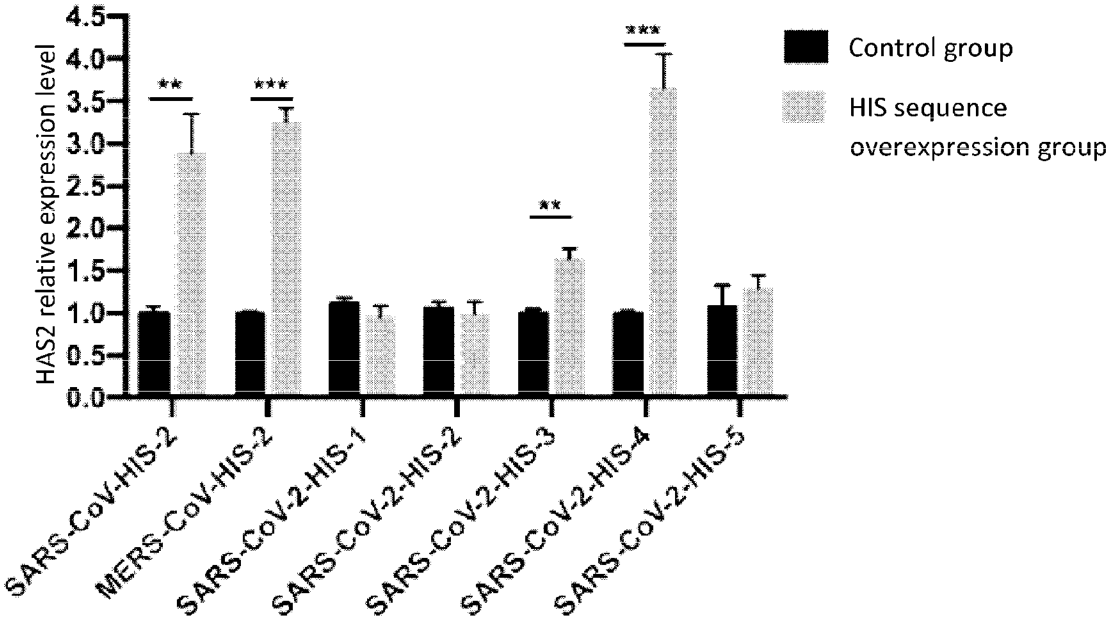

HAS2 relative expression level
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
**
***
**
***
SARS-CoV-HIS-2
MERS-CoV-HIS-2
SARS-CoV-2-HIS-1
SARS-CoV-2-HIS-2
SARS-CoV-2-HIS-3
SARS-CoV-2-HIS-4
SARS-CoV-2-HIS-5
Control group
HIS sequence overexpression group

FIG. 5

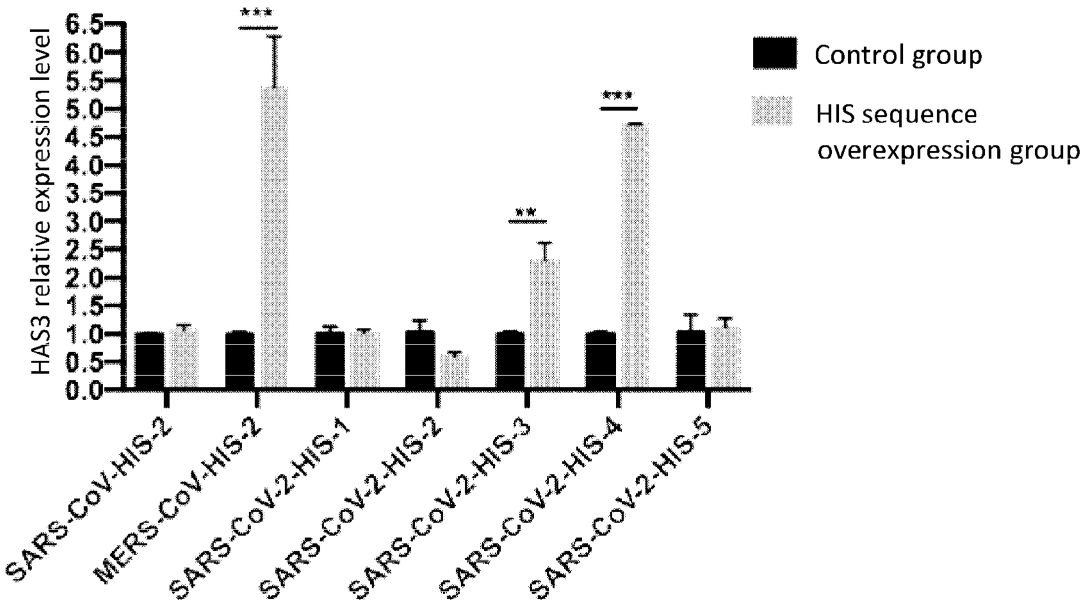


FIG. 6

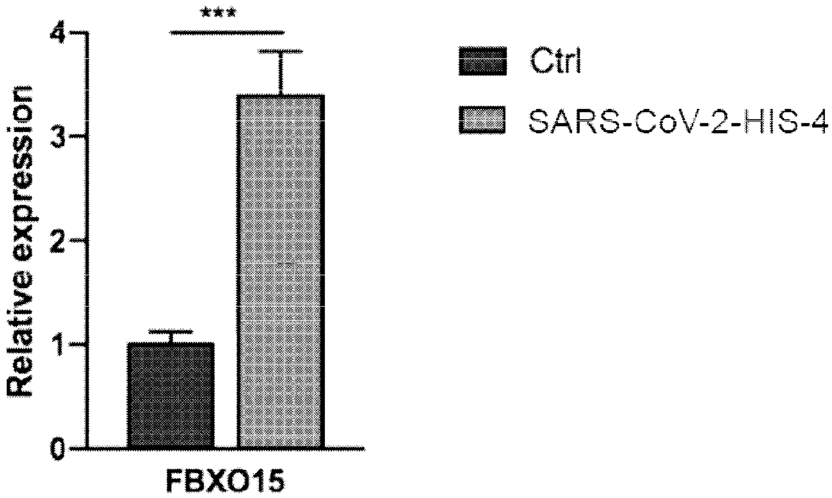


FIG. 7

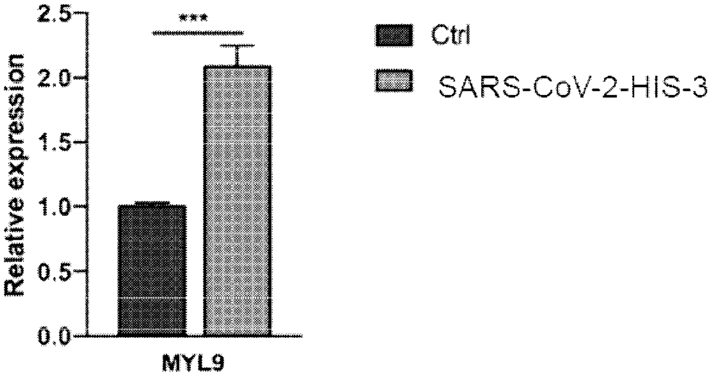


FIG. 8

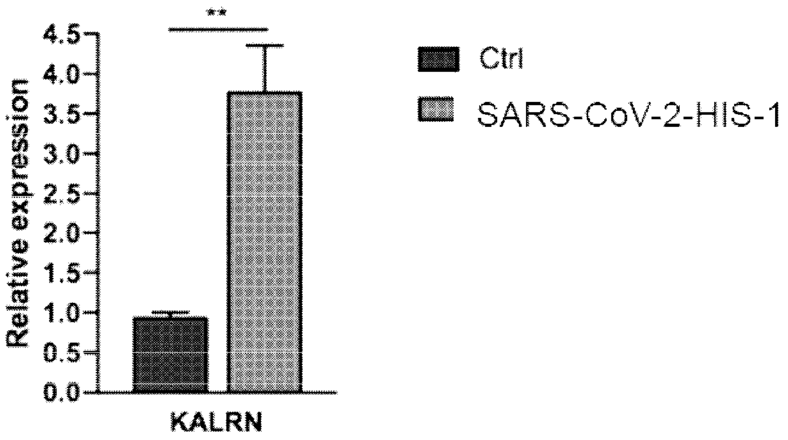


FIG. 9

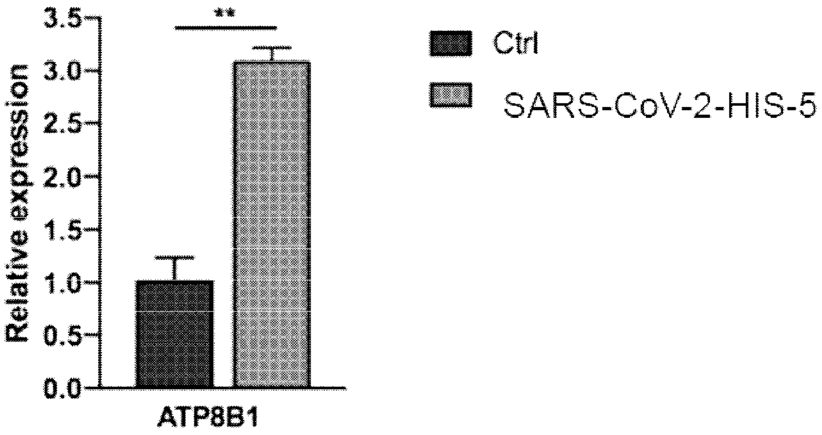


FIG. 10

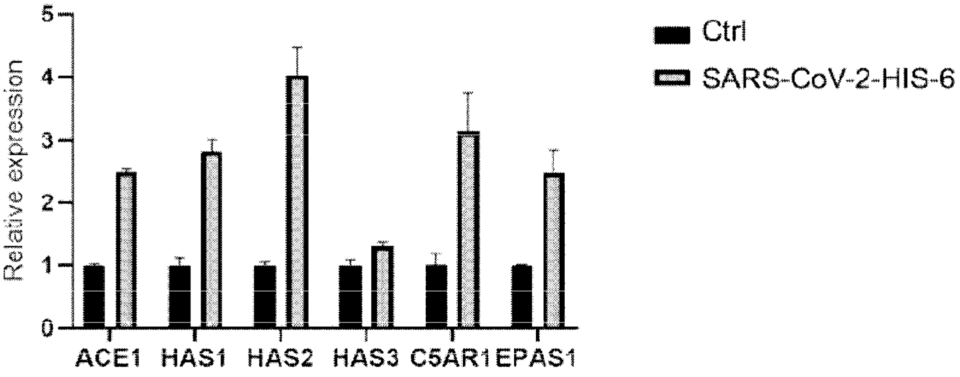


FIG. 11

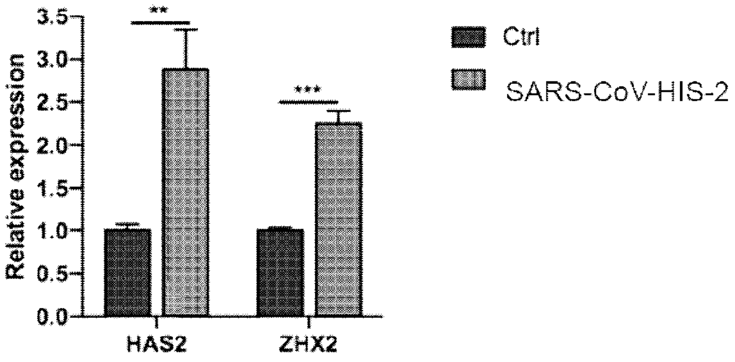


FIG. 12

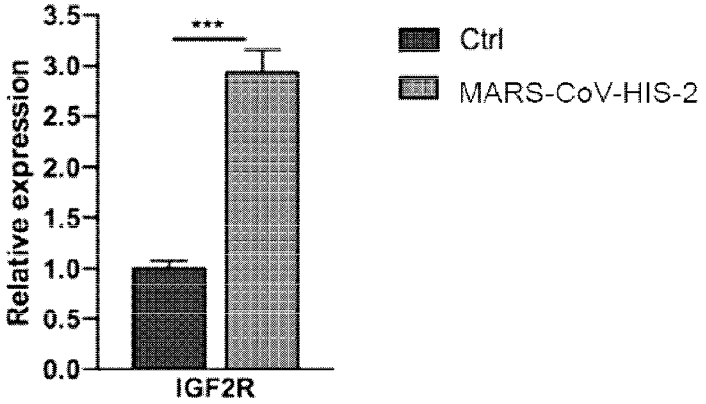


FIG. 13

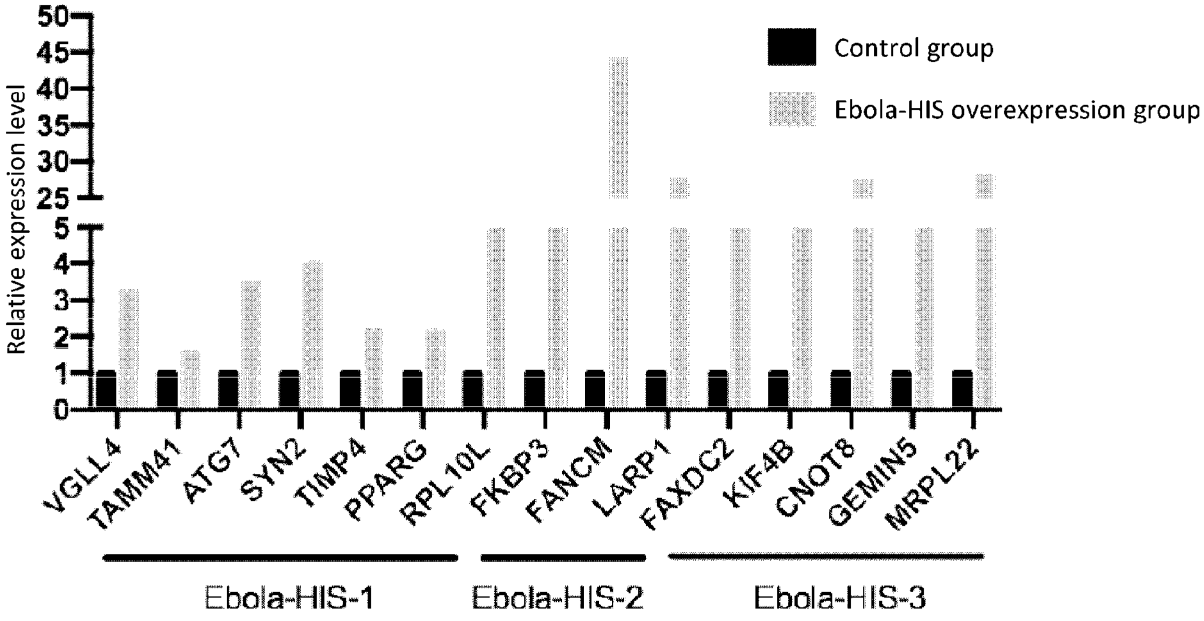


FIG. 14

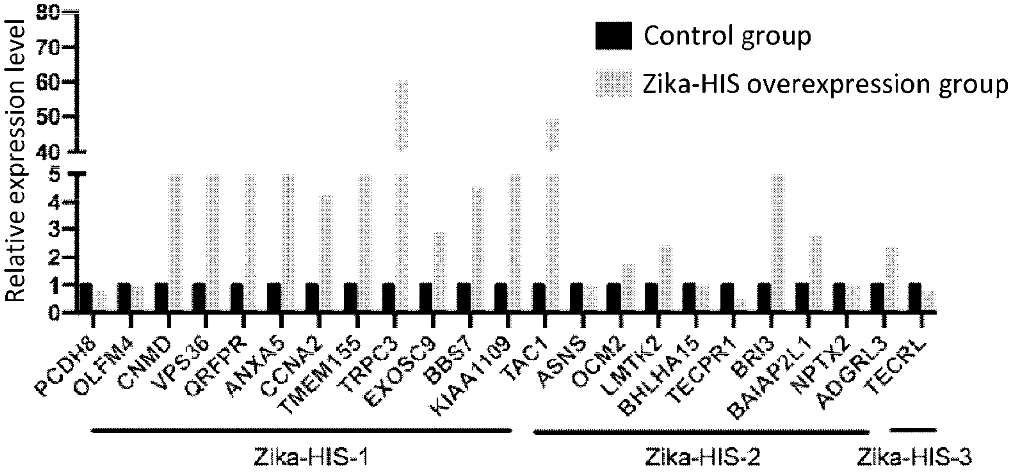


FIG. 15

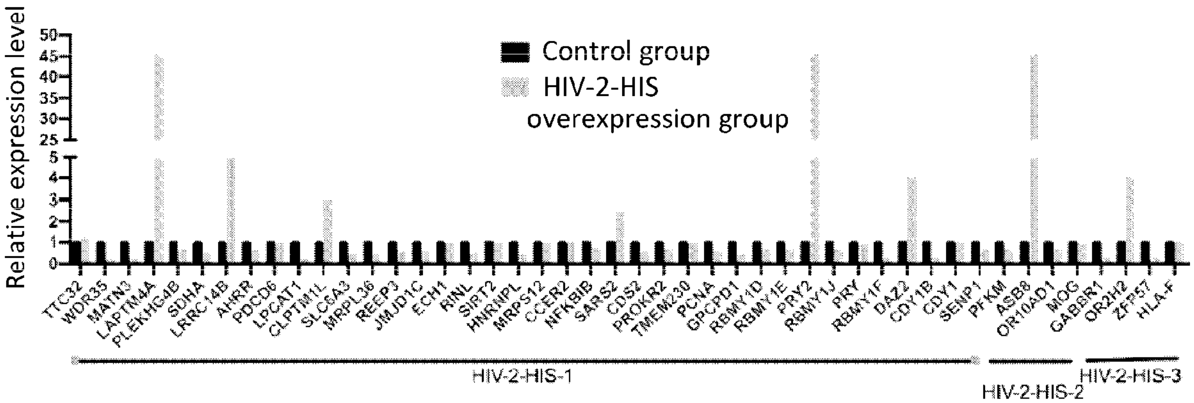


FIG. 16

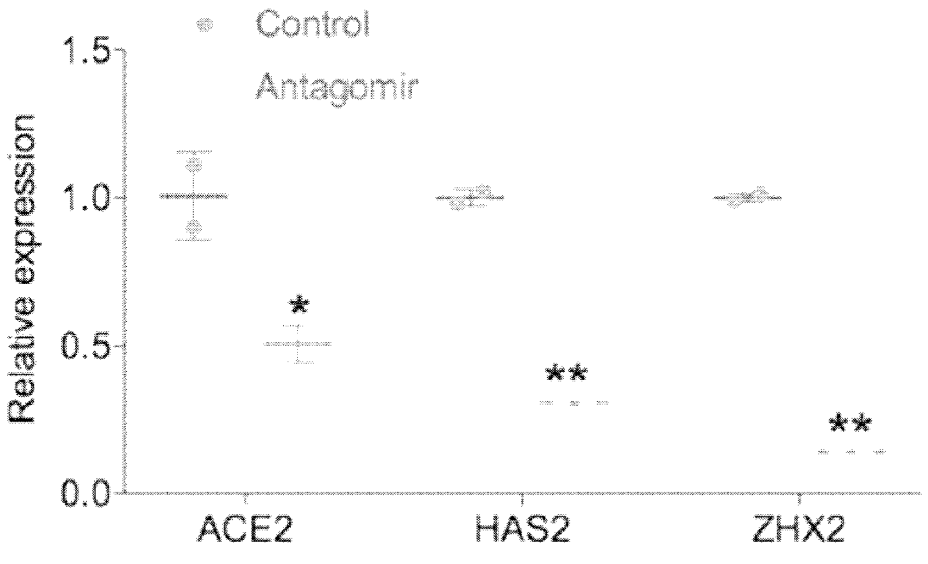


FIG. 17

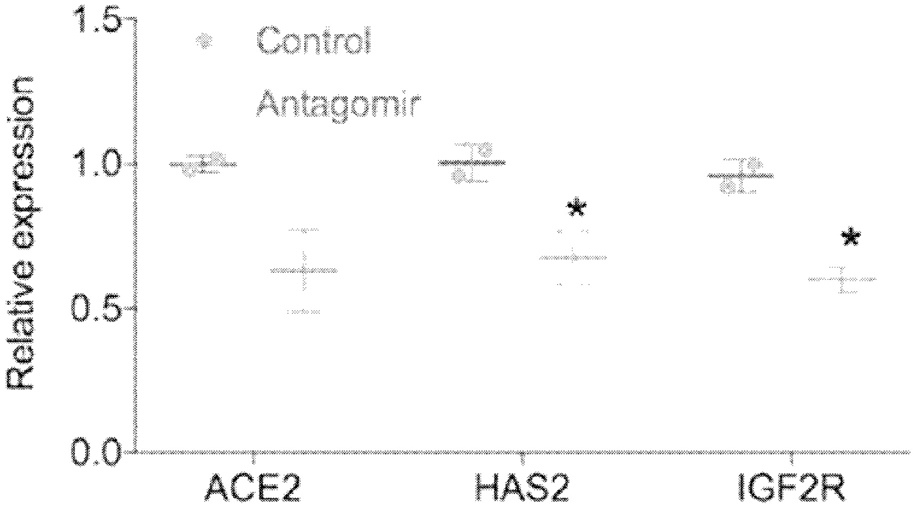

1.5
1.0
0.5
0.0
Relative expression
Control
Antagomir
*
*
ACE2
HAS2
IGF2R

FIG. 18

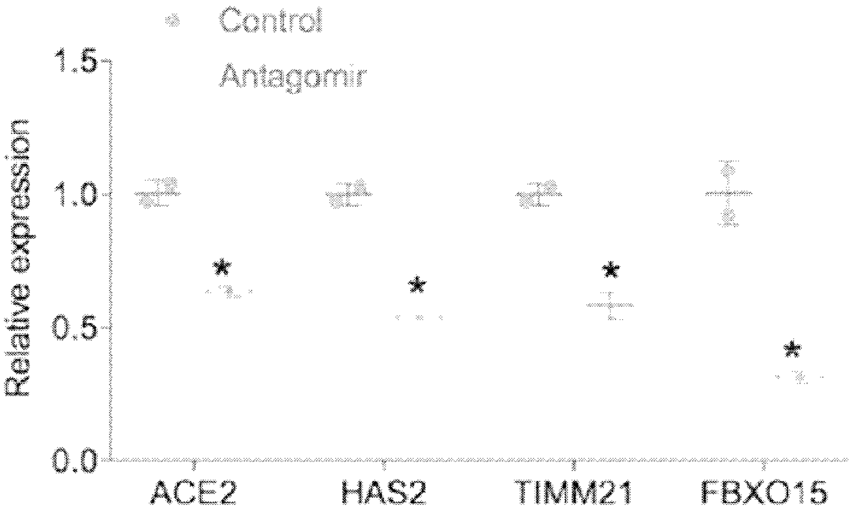

Control
Antagomir
1.5
1.0
0.5
0.0
Relative expression
*
*
*
*
ACE2
HAS2
TIMM21
FBXO15

FIG. 19

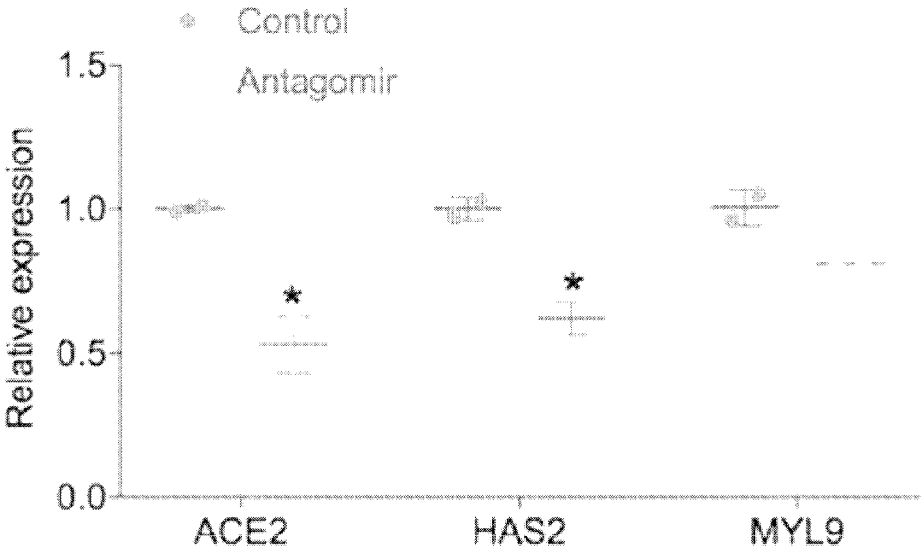

Control
Antagomir
Relative expression
1.5
1.0
0.5
0.0
*
*
ACE2
HAS2
MYL9

FIG. 20

TARGET SEQUENCE OF RNA VIRUS AND USE THEREOF

REFERENCE TO A SEQUENCE LISTING SUBMITTED ELECTRONICALLY VIA EFS-WEB

[0001] The content of the electronically submitted sequence listing in ASCII text file (Name: 4969_0020000_Seqlisting_ST25; Size: 269,003 bytes; and Date of Creation: Jan. 31, 2022) is herein incorporated by reference in its entirety.

TECHNICAL FIELD

[0002] The present invention relates to the field of biotechnology, in particular to a target sequence of an RNA virus and the use thereof.

BACKGROUND OF THE INVENTION

[0003] RNA viruses are also called RNA-type viruses, which refer to viruses whose genetic material is RNA. In the process of virus RNA replication, the activity of enzymes responsible for the error repair mechanism is very low to almost none, thereby leading to very fast mutation. Furthermore, vaccines are developed based on the stable nucleotides sequence or proteins of viruses, and therefore vaccines against RNA viruses are difficult to develop. The RNA viruses cannot be reproduced by themselves, and can be reproduced only in living cells. Common RNA viruses are: HIV, poliovirus, tobacco mosaic virus, SARS virus, MERS virus, ebola virus, severe acute respiratory syndrome-related coronavirus 2 (2019-nCoV), etc. Coronavirus is a type of unsegmented positive-sense RNA virus with an envelope, can infect a variety of hosts such as mammals and birds, and can cause mild to moderate respiratory diseases especially in humans. In the past two decades, the emergence of two highly pathogenic coronaviruses has appeared in the process of zoonotic infection: severe acute respiratory syndrome-related coronavirus (SARS-CoV) and Middle East respiratory syndrome coronavirus (MERS-CoV). Corona Virus Disease 2019, referred to as “COVID-19” briefly, refers to pneumonia caused by the infection of 2019 severe acute respiratory syndrome-related coronavirus 2. COVID-19 is an acute infectious pneumonia. Researchers have discovered that its pathogen is a new type of β-coronavirus that has not previously been found in humans. The virus was subsequently named severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2) by the World Health Organization (WHO). The initial symptoms of a patient with COVID-19 are mostly fever, fatigue and dry cough, and they gradually develop severe symptoms such as dyspnea. In some severe cases, acute respiratory distress syndrome, septic shock and even death may occur. As of Jul. 7, 2020, SARS-CoV-2 has continued to spread in 188 countries and regions around the world, causing more than 11.62 million confirmed cases and538,000 deaths. There is currently no effective target specifically for coronavirus.

[0004] Nucleic acid is an important carrier for the storage and transmission of genetic information in organisms, and also plays an extremely important role in the regulation of biological functions. With people’s deepening understanding of the structure and function of the nucleic acid, the value of nucleic acid as a target for drug design has been paid more and more attention by everyone. MicroRNA (miRNA) is a type of small single-stranded short-sequence RNA with a length of about 22-25 nucleotides, it does not code a protein, but the nucleotides at positions 2-8 from its 5′ end can bind to the 3′ UTR (3′ untranslated region) of homologous mRNA by means of incomplete base pairing. At first, it is believed that only the sequence in one of the strands of the miRNA hairpin structure has a regulatory effect to exert function by negatively regulating gene expression by inducing messenger RNA (mRNA) degradation and post-transcriptional gene silencing, and the other strand would be degraded. However, more and more evidences later show that the upper and lower strands of miRNA can function as an independent miRNA. In addition to negative regulation by miRNA, some cases reported that miRNA can promote gene expression or translation under special circumstances (Vasudevan et al., 2007, Vasudevan and Steitz, 2007, Place et al., 2008). XIAOM et al. found in 2015 that, for example, has-miR-26a-1, has-miR-3179, has-24-1, etc. can bind to an enhancer (the result was published in the journal RNABiology) and activate gene expression at the genome-wide level (XIAO M, LI J, LI W, et al. 2017. MicroRNAs activate gene transcription epigenetically as an enhancer trigger. RNA Biol [J], 14: 1326-1334.). Our previous work has shown that this feature of miRNA is not a single case, but is suitable for many tissues and cells. When studying the epigenetic regulation mechanism of miRNA itself, 1594 miRNA precursors were systematically analyzed in 7 different tissues and cells. It was unexpectedly found that the positions of more than 300 miRNA precursors in the genome highly overlapped with that of the histone modification marker H3K4mel or H3K27ac of the enhancer. This allowed the inventors to link the two important molecular biological events, i. e., miRNA and enhancer that are both histocyte-specific (Xiao et al., 2017). Based on this, the inventors believe that miRNA is an important bifunctional molecule. When miRNA is located in the cytoplasm, it can act on the 3′ UTR region of mRNA, thereby blocking the translation of mRNA and exerting a negative regulatory effect on genes, like a fire extinguisher; in contrast, when miRNA is located in the nucleus, it changes the chromatin state of the enhancer by binding to the enhancer, thereby activating the transcriptional expression of genes, like an igniter. The inventors call the RNA that is located in the nucleus and has an activating effect as NamiRNA (nuclear activating miRNA). Based on this, the inventors propose a NamiRNA-enhancer-target gene network activation model to reveal the function of miRNA in the nucleus. Surprisingly, there is a direct positive regulatory relationship between NamiRNA and target genes, and NamiRNA is also involved in the biological behaviors such as the proliferation, migration and invasion of tumor cells.

[0005] Hyaluronic acid (HA) is one of the main components of glycosaminoglycan (GAG) in proteoglycans, is also one of the components of extracellular matrix (ECM) that has been studied extensively, and plays an important role in the function and development of normal tissues, comprising providing support and anchoring for cells, promoting signaling between cells, and promoting cell movement and migration. HA is synthesized by a type of integral membrane protein called HA synthase (hyaluronic acid synthase, HAS), of which there are three types in vertebrates: HAS1, HAS2 and HAS3. HA is extended by these enzymes whiche are capable of repeatedly adding glucuronic acid and N-acetylglucosamine to the nascent polysaccharide, and extruded through the cell membrane to enter the extracellular space. HA is a macromolecular viscous glycosaminoglycan that can be secreted by type II lung epithelial cells, endothelial cells and lung fibroblasts, wherein fibroblasts can be stimulated by pathogenic factors, such as oxygen free radicals, to synthesize large amounts of HA. The basic structure of HA is β-D gluconic acid and 2-acetyl-2-deoxy-D-glucose, which are linear chain molecular polymers of repeating disaccharides connected by β1.3 and β2.4 glucosidic hond, respectively, and are the most important glycosaminoglycan. HA is mainly distributed in the interstitium around capillaries and bronchioles in lung tissue, and is widely expressed in the extracellular matrix, and can also be expressed on the cell surface. The greatest function of hyaluronic acid is to absorb and store water. One molecule of hyaluronic acid can absorb 9 molecules of water. The increase of hyaluronic acid will undoubtedly aggravate the increase of local water. Studies have shown that HA can increase local edema and promote the inflammatory cascade, leading to leukocyte migration, proliferation and differentiation.

[0006] Hyaluronic acid synthase inhibitor (4-Methylumbelliferone, 4-MU) is a selective inhibitor of HA synthesis. 4-MU is a derivative of the coumarin family. Other coumarin derivatives, such as Marcumar® and Coumadin®, are mostly used as preventive drugs to reduce the occurrence of cardiovascular disease due to the anticoagulant mechanisms thereof.

[0007] ACE2 is a receptor of severe acute respiratory syndrome-related coronavirus 2, and the expression level thereof is closely related to the course of the diseases caused by severe acute respiratory syndrome-related coronavirus 2.

[0008] HAS1, HAS2, and HAS3 belong to the family of hyaluronic acid synthases, and the increase of their expression level and deposition in the extracellular matrix is closely related to the diseases caused by severe acute respiratory syndrome-related coronavirus 2 and the complications thereof.

[0009] FBXO15 is a member of the F-box protein family, and the expression level thereof is closely related to the inflammatory response.

[0010] MYL9 is myosin light chain 9, and the expression level thereof is closely related to inflammatory response.

[0011] KALRN is a RhoGEF kinase, and the expression level thereof is related to the progression of sarcoidosis and inflammation of multiple organs such as kidney and lung.

[0012] ATP8B1 is a member of the type P cation transport ATPase family, and the expression level thereof is closely related to the inflammatory response.

[0013] IGF2R is a receptor for insulin-like growth factor 2 and mannose 6-phosphate, and the expression level thereof is closely related to the inflammatory response.

[0014] C5AR1 is complement component 5a receptor 1, and the expression level thereof is closely related to the regulation of the inflammatory response.

[0015] EPAS1 is endothelial PAS domain protein 1, and the expression level thereof is closely related to the regulation of the inflammatory response.

[0016] TIMM21 is internal mitochondrial membrane translocase 21, and the expression level thereof is closely related to the regulation of the inflammatory response.

[0017] So far, the mechanism of severe acute respiratory syndrome caused by RNA viruses, especially severe acute respiratory syndrome-related coronavirus 2, is not clear. There are also many problems in understanding the pathogenic mechanism and designing or producing vaccines of other related RNA viruses. In addition, the diseases caused by RNA viruses lack effective treatment drugs and treatment regimens, and the virus virulence and susceptible populations are difficult to determine. There is an urgent need to study the pathogenic mechanism of RNA viruses, and develop the detection for the pathogenicity and population susceptibility of RNA viruses, seek for specific drugs and treatment regimens for RNA viruses, prepare RNA virus vaccines with high efficiency and low toxicity, and propose practical Chinese solutions for humans to overcome RNA virus infections.

SUMMARY OF THE INVENTION

[0018] The RNA sequence of severe acute respiratory syndrome-related coronavirus 2 has about 30,000 bases. The inventors found that, when comparing severe acute respiratory syndrome-related coronavirus 2 with the human genome in the early stage, the nucleic acid sequence of severe acute respiratory syndrome-related coronavirus 2 contains 5 human genome sequences, ranging in length from 24-28 bp. These 5 sequences are extremely conserved and identical in humans and primates. The conservation of the 5 sequences suggests that they are of great significance. In order to facilitate the research on the function and use of the above-mentioned conservative sequences, the inventors named the above-mentioned conservative sequences as HISs (Human Insert Sequences). Furthermore, the inventors found that there are 3 and 2 human genome sequences (HIS) in the genomes of SARS and MERS viruses, respectively. The location distribution of HIS in the genomes of severe acute respiratory syndrome-related coronavirus 2, SARS, and MERS viruses is mainly in the enhancer region in human, suggesting that HISs are related to gene activation; there are a large number of inflammatory factor genes in the upstream and downstream 200 K range of the enhancer where the HIS in SARS-CoV-2 is located; the RNA region where HIS is located can form a virus derived hairpin structure. It is found from further analysis that HIS can form a hairpin structure with miRNA precursor characteristics; based on HIS, most of target genes in relation to HIS are also related to inflammatory factors by means of bioinformatics analysis and prediction; the HIS target area of SARS virus and severe acute respiratory syndrome-related coronavirus 2 has hyaluronic acid synthase (HAS) genes; According to the NamiRNA-enhancer-gene activation theory (Xiao et al., 2017) discovered and proposed by the inventors in the previous research work, the inventors believe that the HIS sequences of severe acute respiratory syndrome-related coronavirus 2 and SARS virus will activate inflammatory factors after the human body being infected with the viruses, which causes a storm of inflammatory factors and may produce excessive hyaluronic acid by activating hyaluronic acid synthase to cause ground-glass changes in lung and then lead to ARDS. In view of the fact that the HIS sequences in severe acute respiratory syndrome-related coronavirus 2 are an important material basis and an important pathogenesis for the pathogenicity of the coronavirus, the inventors further confirm by experiments that the HIS sequences in SARS-COV-2, SARS-COV and MERS virus, when overexpressed in cells, can activate the expression of

HAS and inflammatory factors, and increase the production of the extracellular hyaluronic acid. More importantly, it is found that the content of hyaluronic acid in the serum of a patient with COVID-19 is closely related to the severity of the patient's condition. The inventors believe that the target sequences of the virus can also cause changes in hematological indicators and can be used for clinical detection of patient's condition combined with clinical data. Therefore, the targets in coronaviruses can be used in clinical diagnosis, drug therapy design against this target and possible design/optimization of vaccines. The development of such targets can be extended to other RNA viruses, and similar results are obtained by verifying with the typical coronaviruses, HIV, zika virus and ebola virus. In particular, the regions where the HIS sequences of other RNA viruses pair with the human genome are mostly related to the pathogenicity and characteristics of such RNA viruses.

[0019] Comparing with the prior art, the above technical solutions are used in the present invention, and the following technical effects are achieved:

[0020] In the present invention, the gene sequence of the RNA virus is aligned with the human genome to screen out multiple target sequences with not less than 95% similarity to the human genome (i.e., more than 95% of complementary pairing) and stable structure, and the successfully constructed virus fragment has the function of interacting with human genomic DNA and is similar to viral miRNA. In addition, the effect of overexpression of the target sequences of the RNA virus on the expression level of surrounding genes has been verified. The above-mentioned screening and verification have good application value in the diagnosis and detection of RNA viruses, screening of drugs for the treatment of conditions caused by RNA viruses, and design/optimization of vaccines.

[0021] The RNA viruses involved in the present invention comprise RNA viruses that infect humans, RNA viruses that infect poultry, livestock, and zoonotic animals. Specifically, the target sequence consistent with the human genome is named HIS (Human Insert Sequence), the target sequence consistent with the chicken genome is named CIS (Chicken Insert Sequence), and the target sequence consistent with the pig genome is named PIS (Pig Insert Sequence), the target sequence consistent with the dog genome is named DIS (Dog Insert Sequence), and the target sequence consistent with mallard genome is named MIS (Mallard Insert Sequence). The specific target sequences of these viruses, as same as that of SARS-COV-2, can activate gene expression through an enhancer, and are closely related to diseases caused by viruses in humans and other species, and then can be used as targets for the determination of virus virulence. The antisense RNA sequences of the specific target sequences can be used for drug development, and deletion of the target sequences is an important strategy for the design of an attenuated vaccine.

[0022] The present invention overcomes the defects in the prior art, provides a target sequence of an RNA virus which has the function of interacting with the human genome, and verifies the effect of overexpression of the target sequence of the RNA virus on the expression level of surrounding genes. The target sequence and the antisense RNA sequence thereof are developed and used for the diagnosis and treatment of RNA viruses and the design/optimization of vaccines.

[0023] In order to achieve the above objective, the following technical solutions are used in the present invention:

[0024] In the first aspect, the present invention provides a target sequence of an RNA virus. The target sequence is a nucleic acid sequence fragment in the nucleotide sequence of the RNA virus containing not less than 20-40 bases and having not less than 95% similarity to human genome sequence (i.e., more than 95% identity or complementary pairing).

[0025] In order to further optimize the above-mentioned target sequence of the RNA virus, the technical measures used in the present invention also comprise:

[0026] further, the RNA virus comprises but is not limited to: severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), severe acute respiratory syndrome-related coronavirus (SARS-CoV), middle east respiratory syndrome coronavirus (MERS-CoV), zika virus, ebola virus, HIV, norwalk virus, alkhurma virus, enterovirus, kemerovo virus, coxsackievirus, hepatitis A virus, dengue virus 2, rubella virus, marburg marburgvirus, poliovirus, respiratory syncytial virus, mumps virus, australian bat lyssavirus, andes virus, powassan virus, langat virus, eyach virus, colorado tick fever virus, lassa virus, omsk hemorrhagic fever virus, machupo virus, junin virus, guanarito virus, sin nombre virus, hantaan virus, puumala virus, dobrava virus, seoul virus, crimean-congo hemorrhagic fever virus, sabia virus, thogoto virus, european bat lyssavirus 1, european bat lyssavirus 2, chapare virus, rotavirus, tai forest ebolavirus, bundibugyo ebolavirus, rift valley fever virus, irkut virus, influenza A virus, bayou virus, kyasanur forest disease virus, black creek canal virus, Japanese encephalitis virus, duvenhage lyssavirus, Lujo mammarenavirus, measles morbillivirus, tick-borne encephalitis virus, avian influenza virus, swine influenza virus, Rabies virus, etc.

[0027] Further, the target sequence of the RNA virus is selected from any one or more of SEQ ID NO. 1 - SEQ ID NO. 615. Further, the target sequence of the severe acute respiratory syndrome-related coronavirus 2 comprises SEQ ID NO. 1 - SEQ ID NO. 6; and/or, the target sequence of severe acute respiratory syndrome-related coronavirus comprises SEQ ID NO. 7 - SEQ ID NO. 9; and/or, the target sequence of middle east respiratory syndrome coronavirus comprises SEQ ID NO. 10, SEQ ID NO. 11; and/or, the target sequence of zika virus comprises SEQ ID NO. 12 - SEQ ID NO. 14; and/or, the target sequence of ebola virus comprises SEQ ID NO. 15 - SEQ ID NO. 17; and/or, the target sequence of HIV comprises SEQ ID NO. 18 - SEQ ID NO. 26; and/or, the target sequence of norwalk virus comprises SEQ ID NO. 27; and/or, the target sequence of alkhurma virus comprises SEQ ID NO. 28 - SEQ ID NO. 30; and/or, the target sequence of enterovirus comprises SEQ ID NO. 31, SEQ ID NO. 32; and/or, the target sequence of kemerovo virus comprises SEQ ID NO. 33, SEQ ID NO. 34; and/or, the target sequence of coxsackievirus comprises SEQ ID NO. 35; and/or, the target sequence of hepatitis A virus comprises SEQ ID NO. 36 - SEQ ID NO. 46; and/or, the target sequence of dengue virus 2 comprises SEQ ID NO. 47 - SEQ ID NO. 50; and/or, the target sequence of rubella virus comprises SEQ ID NO. 51; and/or, the target sequence of marburg marburgvirus comprises SEQ ID NO. 52 - SEQ ID NO. 56; and/or, the target sequence of poliovirus comprises SEQ ID NO. 57; and/or, the target sequence of respiratory syncytial virus comprises SEQ ID NO. 58 - SEQ ID NO. 85; and/or, the target sequence of mumps virus comprises SEQ ID NO. 86; and/or, the target sequence of australian bat lyssavirus comprises SEQ ID NO. 87; and/or, the target sequence of andes virus comprises SEQ ID NO. 88 - SEQ ID NO. 95; and/or, the target sequence of powassan virus comprises SEQ ID NO. 96, SEQ ID NO. 97; and/or, the target sequence of langat virus comprises SEQ ID NO. 98 - SEQ ID NO. 102; and/or, the target sequence of eyach virus comprises SEQ ID NO. 103 - SEQ ID NO. 113; and/or, the target sequence of colorado tick fever virus comprises SEQ ID NO. 114 - SEQ ID NO. 134; and/or, the target sequence of lassa virus comprises SEQ ID NO. 135, SEQ ID NO. 136; and/or, the target sequence of omsk hemorrhagic fever virus comprises SEQ ID NO. 137, SEQ ID NO. 138; and/or, the target sequence of machupo virus comprises SEQ ID NO. 139 - SEQ ID NO. 140; and/or, the target sequence of junin virus comprises SEQ ID NO. 141; and/or, the target sequence of guanarito virus comprises SEQ ID NO. 142 - SEQ ID NO. 147; and/or, the target sequence of sin nombre virus comprises SEQ ID NO. 148 - SEQ ID NO. 152; and/or, the target sequence of hantaan virus comprises SEQ ID NO. 153 - SEQ ID NO. 161; and/or, the target sequence of puumala virus comprises SEQ ID NO. 162 - SEQ ID NO. 173; and/or, the target sequence of dobrava virus comprises SEQ ID NO. 174 - SEQ ID NO. 185; and/or, the target sequence of seoul virus comprises SEQ ID NO. 186 - SEQ ID NO. 199; and/or, the target sequence of crimean-congo hemorrhagic fever virus comprises SEQ ID NO. 200 - SEQ ID NO. 204; and/or, the target sequence of sabia virus comprises SEQ ID NO. 205 - SEQ ID NO. 212; and/or, the target sequence of thogoto virus comprises SEQ ID NO. 213 - SEQ ID NO. 227; and/or, the target sequence of european bat lyssavirus 1 comprises SEQ ID NO. 228 - SEQ ID NO. 232; and/or, the target sequence of european bat lyssavirus 2 comprises SEQ ID NO. 233; and/or, the target sequence of chapare virus comprises SEQ ID NO. 234; and/or, the target sequence of rotavirus comprises SEQ ID NO. 235 - SEQ ID NO. 277; and/or, the target sequence of tai forest ebolavirus comprises SEQ ID NO. 278, SEQ ID NO. 279; and/or, the target sequence of bundibugyo ebolavirus comprises SEQ ID NO. 280; and/or, the target sequence of rift valley fever virus comprises SEQ ID NO. 281; and/or, the target sequence of irkut virus comprises SEQ ID NO. 282 - SEQ ID NO. 285; and/or, the target sequence of influenza A virus comprises SEQ ID NO. 286 - SEQ ID NO. 313; and/or, the target sequence of bayou virus comprises SEQ ID NO. 314 - SEQ ID NO. 327; and/or, the target sequence of kyasanur forest disease virus comprises SEQ ID NO. 328; and/or, the target sequence of black creek canal virus comprises SEQ ID NO. 329 - SEQ ID NO. 334; and/or, the target sequence of japanese encephalitis virus comprises SEQ ID NO. 335 - SEQ ID NO. 337; and/or, the target sequence of duvenhage lyssavirus comprises SEQ ID NO. 338 - SEQ ID NO. 344; and/or, the target sequence of Lujo alkhurma virus comprises SEQ ID NO. 345; and/or, the target sequence of measles morbillivirus comprises SEQ ID NO. 346; and/or, the target sequence of tick-borne encephalitis virus comprises SEQ ID NO. 347; and/or, the target sequence of avian influenza virus comprises SEQ ID NO. 348 - SEQ ID NO. 420; and/or, the target sequence of swine influenza virus comprises SEQ ID NO. 421 - SEQ ID NO. 521; and/or, the target sequence of rabies virus comprises SEQ ID NO. 522 - SEQ ID NO. 615.

[0028] The naming method of each fragment of the above target sequences is the virus name plus HIS or other assigned name plus the fragment number. The specific target sequences are shown in the following table:

TABLE 1

Target sequence listing of RNA virus

Virus type	Fragment number	Fragment coding sequence	ID number
Severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2)	SARS-CoV--HIS1	5′-UGUCUAUGCUAAUGGAGG UAAAGGCU-3′	SEQ ID NO. 1
	SARS-CoV-2-HIS-2	5′-UAUAACACAUAUAAAAU ACGUGU-3′	SEQ ID NO. 2
	SARS-CoV-2-HIS-3	5′-UUAUAUGCCUUAUUUCUU UACUUU-3′	SEQ ID NO. 3
	SARS-CoV-2-HIS-4	5′-AGGAGAAUGACAAAAAAA AAAAAAAAA-3′	SEQ ID NO. 4
	SARS-CoV-2-HIS-5	5′-UUGUUGCUGCUAUUUUCU AUUUAA-3′	SEQ ID NO. 5
	SARS-CoV-2-HIS-6	5′-CAUGAAGAAACAAUUUAU AAUUUACUUA-3′	SEQ ID NO. 6
severe acute respiratory syndrome-related coronavirus (SARS-CoV)	SARS-CoV-HIS-1	5′-GAGUUGAGGAAGAAGAAG AGGAAGACUGG-3′	SEQ ID NO. 7
	SARS-CoV-HIS-2	5′-UAACAUGCUUAGGAUAAU GGCCUC-3′	SEQ ID NO. 8
	SARS-CoV-HIS-3	5′-AGGAGAAUGACAAAAAAA AAAAAAAAA-3′	SEQ ID NO. 9
Middle East respiratory syndrome coronavirus (MERS-CoV)	MERS-CoV-HIS-1	5′-UUCCAUUUGCACAGAGUA UCUUUU-3′	SEQ ID NO. 10
	MERS-CoV-HIS-2	5′-UGCUGUAAUUGCUGUUGU UGCUGCUGUU-3′	SEQ ID NO. 11
Zika virus	Zika-HIS-1	5′-GAAAAAGAGAAAAGAAAC AAGGG-3′	SEQ ID NO. 12
	Zika-HIS-2	5′-GGGAGGAGGGAGGAAGAG ACUCC-3′	SEQ ID NO. 13
	Zika-HIS-3	5′-GUUCUAGAGAUGCAAGAC UUGUG-3′	SEQ ID NO. 14
Ebola virus	Ebola-HIS-1	5′-ACUCAUUCUACCAUUUUU UAAAUUG-3′	SEQ ID NO. 15
	Ebola-HIS-2	5′-AGAUCCUGUGACUUCUGG ACUUUU-3′	SEQ ID NO. 16
	Ebola-HIS-3	5′-AAAUAUUAUUUUUAAAAU UUACUU-3′	SEQ ID NO. 17
HIV	HIV-1-HIS-1	5′-ACUUUUUAAAA-	SEQ ID NO. 18

TABLE 1-continued

Target sequence listing of RNA virus

Virus type	Fragment number	Fragment coding sequence	ID number
		GAAAAGG GGGGA-3′	
	HIV-1-HIS-2	5′-GAAAAGGAAGGGAAAALTU UCAAA-3′	SEQ ID NO. 19
	HIV-1-HIS-3	5′-AAAUGAACAAGUAGAUAA AUUAG-3′	SEQ ID NO. 20
	HIV-1-HIS-4	5′-AAAUUAUGGUACCAGUUA GAGAAA-3′	SEQ ID NO. 21
	HIV-1-HIS-5	5′-GAAAGAAAAAAUAUAAAU UAAAA-3′	SEQ ID NO. 22
	HIV-1-FHS-6	5′-AUUUAUCAAGAGCCAUUU AAAAA-3′	SEQ ID NO. 23
	HIV-2-HIS-1	5′-UAAAACAGGGACCAAAAG AACCGU-3′	SEQ ID NO. 24
	HIV-2-HIS-2	5′-AGAAUCAGAUAAGUAGAA UUAGA-3′	SEQ ID NO. 25
	HIV-2-HIS-3	5′-AGGCAGAGGAAGAUGAGG CCAAC-3′	SEQ ID NO. 26
Norwalk virus	Norwalk virus-HIS	5′-UAUCAAAAAAUUAAGAAA AGGUUA -3′	SEQ ID NO. 27
Alkhurma virus	Alkhurma virus-HIS-1	5′-GGAUCAGUGGAGAAAGUG AGGAGGAUGA-3′	SEQ ID NO. 28
	Alkhurma virus-HIS-2	5′-AUGAGAGAUCUUGGGGGU GGGAC-3′	SEQ ID NO. 29
	Alkhurma virus-HIS-3	5′-GAAAAACUCAAGAUGAAA GGAAU -3′	SEQ ID NO. 30
Enterovirus	enterovirus-HIS-1	5′-AUUGAUUGGCUUAAGGAG AAAAUA-3′	SEQ ID NO. 31
	enterovirus-HIS-2	5′-AAUUGUUUACCUAUUUAU UGGUUUUGUG-3′	SEQ ID NO. 32
Kemerovo virus	Kemerovo virus-HIS-1	5′-CUGUGCUGAACCAGGACC AGGA-3′	SEQ ID NO. 33
	Kemerovo virus-HIS-2	5′-AGAUGAAGCAGUCACCAA CCGC-3′	SEQ ID NO. 34
Coxsackievirus	Coxsackievirus-HIS	5′-AUUAGAUUUCAACACAGG UGCUACAUC-3′	SEQ ID NO. 35
Hepatitis A virus	Hepatitis A virus-HIS-1	5′-UUGGAAUGUUUUGCUCCU CUUUA-3′	SEQ ID NO. 36
	Hepatitis A virus-HIS-2	5′-GAAAUUUUAUUAUUUUGU UCAGU-3′	SEQ ID NO. 37
	Hepatitis A virus-HIS-3	5′-UUAGCUAGAUUUACAGAU UUGGA-3′	SEQ ID NO. 38
	Hepatitis A virus-HIS-4	5′-AACAAGAGCAGGCCAGUG UGGUGG-3′	SEQ ID NO. 39
	Hepatitis A virus-HIS-5	5′-UUGAGGAAAAGGGAACCC UGUACA-3′	SEQ ID NO. 40
	Hepatitis A virus-HIS-6	5′-CCAGGCACUGGGAAGUCA GUGGCA-3′	SEQ ID NO. 41
	Hepatitis A virus-HIS-7	5′-AAUUAGGAGUGAUACCUU CACUAA-3′	SEQ ID NO. 42
	Hepatitis A virus-HIS-8	5′-UGAGAAAAAGGCCACUGU CCUUUA-3′	SEQ ID NO. 43
	Hepatitis A virus-HIS-9	5′-ACAAAUUGGAGAAAUAGU GAAAA-3′	SEQ ID NO. 44
	Hepatitis A vims-HIS-10	5′-GAAGCAGAGAGAAAGUAG AGAAG-3′	SEQ ID NO. 45
	Hepatitis A virus-HIS-11	5′-UCAAAAGGAGAGAACAGA UGCUGG-3′	SEQ ID NO. 46
Dengue virus 2	Dengue virus 2-HIS-1	5′-CAAAAGAAGGCAUUAAAA GAGGA-3′	SEQ ID NO. 47
	Dengue virus 2-HIS-2	5′-GAGAUGGACUUUGAUUUC UGUGA-3′	SEQ ID NO. 48
	Dengue virus 2-HIS-3	5′-GGAAAUCCAGGGAGGUUU UGGAA-3′	SEQ ID NO. 49
	Dengue virus 2-HIS-4	5′-AAAGGAAGAAAUUGAAAC CCAGA-3′	SEQ ID NO. 50
Rubella virus	Rubella virus-HIS	5′-GUGGCAGGCCCAUUACAC CACCA-3′	SEQ ID NO. 51
Marburg Marburgvir us	Marburg Marburgvirus-HIS-1	5′-AGUUUAAAUUUAUAUCCA AAAUAAAUUU-3′	SEQ ID NO. 52
	Marburg Marburgvirus-HIS-2	5′-AAGAAAAAGAUAAAUAGA ACACAAAGAAUUGACAAAAUU U-3′	SEQ ID NO. 53
	Marburg Marburgvirus-HIS-3	5′-UCUAAGCGAAGUAACAAC AAGAGU-3′	SEQ ID NO. 54
	Marburg Marburgvirus-HIS-4	5′-AACAGAAAGAAGCAUUAU UACAUCAGGCUUCU-3′	SEQ ID NO. 55
	Marburg Marburgvirus-HIS-5	5′-UGAUUUAUAUUUACUGGU AUAAAAUAGU-3′	SEQ ID NO. 56
Poliovirus	Poliovirus-HIS	5′-AACAAACAAACCAGAGAC ACUAAGGAAAUGCA-3′	SEQ ID NO. 57
Respiratory syncytial virus	Respiratory syncytial virus-HIS-1	5′-AUACAAUCAAAUUGAAUG GCAU-3′	SEQ ID NO. 58
	Respiratory syncytial virus-HIS-2	5′-AGAUGACAAUUGUGAAAU UAAA-3′	SEQ ID NO. 59
	Respiratory syncytial virus-HIS-3	5′-GUUAUAUAUGGGAAAUGA UGGAAUUAACA-3′	SEQ ID NO. 60
	Respiratory syncytial virus-HIS-4	5′-AAAAAACUAAGUGAUUCA ACA-3′	SEQ ID NO. 61
	Respiratory syncytial virus-HIS-5	5′-AAAUACAAAAAAUAUACU GAAUACAA-3′	SEQ ID NO. 62
	Respiratory syncytial virus-HIS-6	5′-UUUACAUUCCUGGUCAAC UAUGAAAUGAAACUAUUGC-3′	SEQ ID NO. 63
	Respiratory syncytial virus-HIS-7	5′-CUACAAAAAAAUGCUAAA AGAA-3′	SEQ ID NO. 64

TABLE 1-continued

Target sequence listing of RNA virus			
Virus type	Fragment number	Fragment coding sequence	ID number
	Respiratory syncytial virus-HIS-8	5′-AUGCUGAACAACUCAAAG AAAA-3′	SEQ ID NO. 65
	Respiratory syncytial virus-HIS-9	5′-AGGAAAGUGAAAAGAUGG CAAA-3′	SEQ ID NO. 66
	Respiratory syncytial virus-HIS-10	5′-AAUGAGGAAAGUGAAAAG AUGGCAAAAGA-3′	SEQ ID NO. 67
	Respiratory syncytial virus-HIS-11	5′-CAAGAAAAAAGAUAGUAU CAU-3′	SEQ ID NO. 68
	Respiratory syncytial virus-HIS-12	5′-CCAUAGAAACAUUUGAUA ACAAUGAAGAA-3′	SEQ ID NO. 69
	Respiratory syncytial virus-HIS-13	5′-AAAGUAUAUAUUAUGUUA CAACA-3′	SEQ ID NO. 70
	Respiratory syncytial virus-HIS-14	5′-AUGAUAACAACAAUAAUC UCUUU-3′	SEQ ID NO. 71
	Respiratory syncytial virus-HIS-15	5′-ACUAAUACACAUGAUAAC AA-3′	SEQ ID NO. 72
	Respiratory syncytial virus-HIS-16	5′-UGAUAACAACAAUAAUCU CUUUGCUA-3′	SEQ ID NO. 73
	Respiratory syncytial virus-HIS-17	5′-GAAAAGGAAAAGAAGAUU UCUUG-3′	SEQ ID NO. 74
	Respiratory syncytial virus-HIS-18	5′-AAUGUACAGCAUCCAAUA AAAA-3′	SEQ ID NO. 75
	Respiratory syncytial virus-HIS-19	5′-UAAUUAUUUUGAAUGGCC ACCCCAUG-3′	SEQ ID NO. 76
	Respiratory syncytial virus-HIS-20	5′-AAUUAUUUUGAAUGGCCA CCC-3′	SEQ ID NO. 77
	Respiratory syncytial virus-HIS-21	5′-UCUAUAAAUAAUAUAACU AAA-3′	SEQ ID NO. 78
	Respiratory syncytial virus-HIS-22	5′-UAAAUAUAGAUAAAAUAU ACAUUA-3′	SEQ ID NO. 79
	Respiratory syncytial virus-HIS-23	5′-AAAUGUUUGUUUAAUUAC AUGGAUUAGUA-3′	SEQ ID NO. 80
	Respiratory syncytial virus-HIS-24	5′-AUGGUUAAUACAUUGGUU UAAUUUAUA-3′	SEQ ID NO. 81
	Respiratory syncytial virus-HIS-25	5′-AACUAUAUUAAAAACUUA UGUAU-3′	SEQ ID NO. 82
	Respiratory syncytial virus-HIS-26	5′-UAUAGAACAUGAAAAAUU AAAALTULTUC-3′	SEQ ID NO. 83
	Respiratory syncytial virus-HIS-27	5′-UAGACAAUAUAACUAUAU UAAAA-3′	SEQ ID NO. 84
	Respiratory syncytial virus-HIS-28	5′-AAUGUUACCAUUGUUAUC UAAUA-3′	SEQ ID NO. 85
Mumps virus	Mumps virus-HIS	5′-AGGUAAAUUAAUGAGAGA GAAUGGAGUU-3′	SEQ ID NO. 86
Australian bat lyssa	Australian bat lyssavirus-HIS	5′-UAUUUUAAAAGGCAGAUA AUUAGA-3′	SEQ ID NO. 87

TABLE 1-continued

Target sequence listing of RNA virus			
Virus type	Fragment number	Fragment coding sequence	ID number
virus			
Andes virus	Andes virus-HIS-1	5′-GGAACUUGGUGCAUUUUU UUCUA-3′	SEQ ID NO. 88
	Andes virus-HIS-2	5′-AUUUUUCUUGAUUGCUUU UCAA-3′	SEQ ID NO. 89
	Andes virus-HIS-3	5′-UAUUCUGAAAAUGGUAUA UUUAA-3′	SEQ ID NO. 90
	Andes virus-HIS-4	5′-AGCCUAUUUUCAUUGAUG CCUGA-3′	SEQ ID NO. 91
	Andes virus-HIS-5	5′-UCAACAAAUAUUUACAGG CAAAA-3′	SEQ ID NO. 92
	Andes virus-HIS-6	5′-UUAGAAAAAUGGAAAAGU AUAGA-3′	SEQ ID NO. 93
	Andes virus-HIS-7	5′-AAGAGCUCAACAAAUAUU UACAG-3′	SEQ ID NO. 94
	Andes virus-HIS-8	5′-UCUAAAUAUUCAGAAUGC ACUAGAGAAA-3′	SEQ ID NO. 95
Powassan virus	Powassan vinis-HIS-1	5′-UGAUGGGGGUUGACGGAG UUGGGGAGU-3′	SEQ ID NO. 96
	Powassan virus-HIS-2	5′-GGGGAUUGGAAAGGCUCU CUGUG-3′	SEQ ID NO. 97
Langat virus	Langat vinzs-HIS-1	5′-AAAUGGAGCAGAAAGAAC ACUCAGG-3′	SEQ ID NO. 98
	Langat virus-HIS-2	5′-UGGCUCGAAGAGCAUGGA GAGGAA-3′	SEQ ID NO. 99
	Langat virus-HIS-3	5′-AGGAAGGGGAUUGAGAGA CUCAC-3′	SEQ ID NO. 100
	Langat vims-HIS-4	5′-AAAAUAGACUGGAGAUGG CCAUGUGGAGAAGC-3′	SEQ ID NO. 101
	Langat virus-HIS- 5	5′-CAGCGCAGGGGAAGAGUG GGCAGGCAG-3′	SEQ ID NO. 102
Eyach virus	Eyach virus-HIS-1	5′-AAUAAGAAAAGCAACAUU GUGAUULTUUAAUUA-3′	SEQ ID NO. 103
	Eyach virus-HIS-2	5′-UAAAAAAAGUCAAAUUUA UGAUUA-3′	SEQ ID NO. 104
	Eyach virus-HIS-3	5′-CUUUGGCAUUUCAGUGAU UCAGCAAAA-3′	SEQ ID NO. 105
	Eyach vims-HIS-4	5′-AAAUGUGCUCCCCUUUCC UGGA-3′	SEQ ID NO. 106
	Eyach vims-HIS-5	5′-UUUUAAAGGAGUGGUGAA GAAGAAAGA-3′	SEQ ID NO. 107
	Eyach virus-HIS-6	5′-AAAUAAUAUAAAUGCAUU CAACU-3′	SEQ ID NO. 108
	Eyach virus-HIS-7	5′-GGCAGGUGUGGUUGCUCA AGCUGUAA-3′	SEQ ID NO. 109
	Eyach virus-HIS-8	5′-UAUAACAUUUUCCUGCUU CCAA-3′	SEQ ID NO. 110

TABLE 1-continued

Target sequence listing of RNA virus			
Virus type	Fragment number	Fragment coding sequence	ID number
	Eyach virus-HIS-9	5′-UCAUUGGAAGAUGGAGCU CUUU-3′	SEQ ID NO. 111
	Eyach virus-HIS-10	5′-CAGCUUACUCUUCCUCAG AGUUCUUU-3′	SEQ ID NO. 112
	Eyach virus-HIS-11	5′-UUUAUGAAUUCUACAGAA AUAAUGAUAAUG-3′	SEQ ID NO. 113
Colorado tick fever virus	Colorado tick fever virus-HIS-1	5′-AAAGAUUAUGGAAACULTUUCUG -3′	SEQ ID NO. 114
	Colorado tick fever virus-HIS-2	5′-UUGCUGUUUUUCCAAACA CUAGA-3′	SEQ ID NO. 115
	Colorado tick fever virus-HIS-3	5′-GUCAAUCCAAAUAUUGGA AGAAGCAGAAGUUAAU-3′	SEQ ID NO. 116
	Colorado tick fever virus-HIS-4	5′-AUGUGGAGACAUUCCAGC ACAGAGGAAAC-3′	SEQ ID NO. 117
	Colorado tick fever virus-HIS-5	5′-UCAGGCUCAAGUGAUCUC UCAUUUCA-3′	SEQ ID NO. 118
	Colorado tick fever virus-HIS-6	5′-UUAUAUUGAAGUUUAUGA AGUUG-3′	SEQ ID NO. 119
	Colorado tick fever virus-HIS-7	5′-AGAUAUAGGAAUGUGUCU GAAA-3′	SEQ ID NO. 120
	Colorado tick fever virus-HIS-8	5′-AAAAGUCAAGAAAAUUAA AUUUAUA-3′	SEQ ID NO. 121
	Colorado tick fever virus-HIS-9	5′-UAUGCCUGAUAAUUUUUC ALTUGG-3′	SEQ ID NO. 122
	Colorado tick fever virus-HIS-10	5′-AUAAAGGAAAAGUCAAGA AAALTU-3′	SEQ ID NO. 123
	Colorado tick fever virus-HIS-11	5′-AGAGAGAGAGAAAAGAAA AUUG-3′	SEQ ID NO. 124
	Colorado tick fever virus-HIS-12	5′-UAUGCCUGAUAAUUUUUC AUUG-3′	SEQ ID NO. 125
	Colorado tick fever virus-HIS-13	5′-CUGUGUUUUCUCCUAGAA UGUCA-3′	SEQ ID NO. 126
	Colorado tick fever virus-HIS-14	5′-AAAGACAGGAUUUCAUUA UUUGUA-3′	SEQ ID NO. 127
	Colorado tick fever virus-HIS-15	5′-UGGAUGUGAGAAAUACUU GGGA-3′	SEQ ID NO. 128
	Colorado tick fever virus-HIS-16	5′-AAAAGACAGGAUUUCAUU AUUU-3′	SEQ ID NO. 129
	Colorado tick fever virus-HIS-17	5′-AAAAGACAGGAUUUCAUU AUUUGUAU-3′	SEQ ID NO. 130
	Colorado tick fever virus-HIS-18	5′-GACAGGAUUUCAUUAUUU GUAU-3′	SEQ ID NO. 131
	Colorado tick fever virus-HIS-19	5′-AGUUCUCUUUUGACAUUU UGUUC-3′	SEQ ID NO. 132
	Colorado tick fever virus-HIS-20	5′-UGACAUUUUGUUCUUUCU UUG-3′	SEQ ID NO. 133
	Colorado tick fever virus-HIS-21	5′-GAAAAUGUUGUCCAACAA UCCAAUCAA-3′	SEQ ID NO. 134
Lassa virus	Lassa virus-HIS-1	5′-GGAAGAAAAGACAUUAAA CUAAUU-3′	SEQ ID NO. 135
	Lassa virus-HIS-2	5′-UAAUCUUCUAUAAGUCUA GUAAA-3′	SEQ ID NO. 136
Omsk hemorrhagic fever virus	Omsk hemorrhagic fever vinis-HIS-1	5′-CAGGAAUCCUUGUAGUGA UGGGAUUGU-3′	SEQ ID NO. 137
	Omsk hemorrhagic fever virus-HIS-2	5′-UAUAUUCAAUGGCAAAAG AAAACAAAU-3′	SEQ ID NO. 138
Machupo virus	Machupo virus-HIS-1	5′-AAUGCCUUAAUCUCAGAU AAUUUGUUAA-3′	SEQ ID NO. 139
	Machupo virus-HIS-2	5′-UAAUUUGUUAAUGAAGAA UAAAAUUAA-3′	SEQ ID NO. 140
Junin virus	Junin virus-HIS	5′-AACAAGUUUCUCCUUAUC AUAAA-3′	SEQ ID NO. 141
Guanarito virus	Guanarito virus-HIS-1	5′-CAUAGUAUCUCUUAUAAU CCUUUUCAUUU-3′	SEQ ID NO. 142
	Guanarito virus-HIS-2	5′-AUAGUAUCUCUUAUAAUC CUUUUCAUUU-3′	SEQ ID NO. 143
	Guanarito virus-HIS-3	5′-UACAAACAUGGGCAAUUC AAAAUC-3′	SEQ ID NO. 144
	Guanarito virus-HIS-4	5′-GCUCUUCUUUCCUUAACA AAUGU-3′	SEQ ID NO. 145
	Guanarito virus-HIS-5	5′-UGUUAAACACUUUCUUUC CUUUU-3′	SEQ ID NO. 146
	Guanarito virus-HIS-6	5′-AUAGUAUCUCUUAUAAUC CUUUU-3′	SEQ ID NO. 147
Sin Nombre virus	Sin Nombre virus-HIS-1	5′-ACAACUGAAACAAUGCAA GGAAU-3′	SEQ ID NO. 148
	Sin Nombre virus-HIS-2	5′-GUUCAAGGGCCAAUUAUA UCACA-3′	SEQ ID NO. 149
	in Nombre virus-HIS-3	5′-UAUAAAAUUUUCUCAGGU CUAU-3′	SEQ ID NO. 150
	Sin Nombre virus-HIS-4	5′-AGAAAUUCAGGAAAAUGG AAAAA-3′	SEQ ID NO. 151
	Sin Nombre virus-HIS-5	5′-CACAAAGCUCAAGCACGU AUUGU-3′	SEQ ID NO. 152
Hantaan virus	Hantaan virus-HIS-1	5′-CUUGUUUUCUUUCCCUUU CUUUCUG-3′	SEQ ID NO. 153
	Hantaan virus-HIS-2	5′-UUUCUUUCCCUUUCUUUC UGCUUUCU-3′	SEQ ID NO. 154
	Hantaan virus-HIS-3	5′-UUUUCUUUCCCUUUCUUU CUGCUUUCUCU-3′	SEQ ID NO. 155
	Hantaan virus-HIS-4	5′-UUUCUUUCCCUUUCUUUC UGCUU-3′	SEQ ID NO. 156
	Hantaan virus-HIS-5	5′-UUUCUUUCCCUUUCUUUC UGCUUUCU-3′	SEQ ID NO. 157

TABLE 1-continued

Target sequence listing of RNA virus

Virus type	Fragment number	Fragment coding sequence	ID number
	Hantaan virus-HIS-6	5′-AUAUGGAUGUAGAUUUCA UUUG-3′	SEQ ID NO. 158
	Hantaan virus-HIS-7	5′-UUUUCUUUCCCUUUCUUU CUGCUUUCU-3′	SEQ ID NO. 159
	Hantaan virus-HIS-8	5′-ACAUCUUUACAAUGUGGA UAUUUCUUC-3′	SEQ ID NO. 160
	Hantaan virus-HIS-9	5′-UUCAUACAUUCUAAACUU AAUUCCAGAU-3′	SEQ ID NO. 161
Puumala virus	Puumala virus-HIS-1	5′-GACUACAAGAGAAGGAUG GCAGA-3′	SEQ ID NO. 162
	Puumala virus-HIS-2	5′-AAUGGCAGUUAUGAAUAU AUUA-3′	SEQ ID NO. 163
	Puumala virus-HIS-3	5′-AAGGUUGUAUUUUAUUAU UUAA-3′	SEQ ID NO. 164
	Puumala virus-HIS-4	5′-CCUUUUUCCUUUUCAUCA CUUUUUUU-3′	SEQ ID NO. 165
	Puumala virus-HIS-5	5′-CAGGAAAAAAAUGGAUAC UAAA-3′	SEQ ID NO. 166
	Puumala virus-HIS-6	5′-AUUAUUUUAUAAUCAUUA UCUAAUUA-3′	SEQ ID NO. 167
	Puumala virus-HIS-7	5′-UAUAUAUAUGCAAGUAGC AUAUAUAUA-3′	SEQ ID NO. 168
	Puumala virus-HIS-8	5′-UGUUAGAUUUCUUGUCAU UUUUUCC-3′	SEQ ID NO. 169
	Puumala virus-HIS-9	5′-CCACAGCAACAUGGUUUC AGUAU-3′	SEQ ID NO. 170
	Puumala virus-HIS-10	5′-CUUGUUAAGUACUUGAUA UCUGU-3′	SEQ ID NO. 171
	Puumala virus-HIS-11	5′-AUUCUCUUAUUAUGAAUA AAGCA-3′	SEQ ID NO. 172
	Puumala virus-HIS-12	5′-AGAGAGAAAGAAAGAGAA UUGGGGAGU-3′	SEQ ID NO. 173
Dobrava virus	Dobrava virus-HIS-1	5′-AUAUGGAUGUAGAUUUCA UUUG-3′	SEQ ID NO. 174
	Dobrava virus-HIS-2	5′-AACAUCUUAUUUCCUUCU UUUC-3′	SEQ ID NO. 175
	Dobrava virus-HIS-3	5′-UUUUUAGCCCUUGCAAAG AACU-3′	SEQ ID NO. 176
	Dobrava virus-HIS-4	5′-CUUCAUUAAGUGUUUUUA UCGGAAGUCA-3′	SEQ ID NO. 177
	Dobrava virus-HIS-5	5′-UGCCCUGACUUCACAGGC CAUUU-3′	SEQ ID NO. 178
	Dobrava virus-HIS-6	5′-AUUAUCUUAAGAAAGAUU AAAGAAGAAUUUG-3′	SEQ ID NO. 179
	Dobrava virus-HIS-7	5′-UCAAAGCAAAAUAGGUUC AGAGC-3′	SEQ ID NO. 180
	Dobrava virus-HIS-8	5′-AACUUUUUAUUGAUCCAG UGCUCA-3′	SEQ ID NO. 181
	Dobrava virus-HIS-9	5′-AGAUAUCUUUCAAAAAAU UUCAA-3′	SEQ ID NO. 182
	Dobrava virus-HIS-10	5′-AUGCAUACAACAAUGGGA AUGUCAUUU-3′	SEQ ID NO. 183
	Dobrava virus-HIS-11	5′-AUUGUUUAUAUUUAUUUU CAUUU-3′	SEQ ID NO. 184
	Dobrava virus-HIS-12	5′-CAACAUAAAAAAUCAACC AUAUU-3′	SEQ ID NO. 185
Seoul virus	Seoul vims-HIS-1	5′-UCCUCUUUUCUUUUCCUU UCUCCUUCUUU-3′	SEQ ID NO. 186
	Seoul virus-HIS-2	5′-CAGAAAAGCAGUAUGAGA AGGA-3′	SEQ ID NO. 187
	Seoul virus-HIS-3	5′-UUGCCUGGGGAAAGGAGG CAGU-3′	SEQ ID NO. 188
	Seoul virus-HIS-4	5′-CAGAAAAGCAGUAUGAGA AGGA-3′	SEQ ID NO. 189
	Seoul virus-HIS-5	5′-UCUUUUCUUUUCCUUUCU CCUUCUUU-3′	SEQ ID NO. 190
	Seoul virus-HIS-6	5′-GUCCUCUUUUCUUUUCCU UUCUCCUUCUUU-3′	SEQ ID NO. 191
	Seoul virus-HIS-7	5′-CUUUUCUUUUCCUUUCUC CUUC-3′	SEQ ID NO. 192
	Seoul virus-HIS-8	5′-CUCUUUUCUUUUCCUUUC UCCUUCUU-3′	SEQ ID NO. 193
	Seoul virus-HIS-9	5′-UUAAUAAGAAUACAGAUU UAUU-3′	SEQ ID NO. 194
	Seoul virus-HIS-10	5′-UCUCUGAGUUAGAAAAUG AGAAAGU-3′	SEQ ID NO. 195
	Seoul virus-HS-11	5′-CUUUGCAUUAAAAAAUGU GUUUGA-3′	SEQ ID NO. 196
	Seoul virus-HIS-12	5′-UUUUAUAUGUCUAGAAAA CUUAGACACUAUA-3′	SEQ ID NO. 197
	Seoul virus-HIS-13	5′-CUACAGGAUGUAGAUUUU GAAAAUA-3′	SEQ ID NO. 198
	Seoul virus-HIS-14	5′-UCUUUGUAUUCUGGCUUU CCUUCUUUGGUUG-3′	SEQ ID NO. 199
Crimean-Congo hemorrhagi c fever virus	Crimean-Congo hemorrhagic fever virus-HS-1	5′-AGAAGACACAAAAAAAUG UGUUAACACAAAAC-3′	SEQ ID NO. 200
	Crimean-Congo hemorrhagic fever virus-HIS-2	5′-UCAGUGUUUUCUGACUCC AAAGUU-3′	SEQ ID NO. 201
	Crimean-Congo hemorrhagic fever virus-HIS-3	5′-UACCAAGAAAAUGAAGAA GGCUCUUCUGA-3′	SEQ ID NO. 202
	Crimean-Congo hemorrhagic fever virus-HIS-4	5′-UUUACUUGCUUAUGUAAC CUUAUUUU-3′	SEQ ID NO. 203
	Crimean-Congo	5′-	SEQ ID

TABLE 1-continued

Target sequence listing of RNA virus

Virus type	Fragment number	Fragment coding sequence	ID number
	hemorrhagic fever virus-HIS-5	UUUCUCUAUUUUCUCUUG UUUUAAAC-3′	NO. 204
Sabia virus	Sabia virus-HIS-1	5′-AAGAUGACUAUCUAAAAU GUCAGG-3′	SEQ ID NO. 205
	Sabia virus-HIS-2	5′-AUUCACUGCCUUCUUCCC UCUCA-3′	SEQ ID NO. 206
	Sabia virus-HIS-3	5′-CUGUCUGCUAACCAGUAU GAACA-3′	SEQ ID NO. 207
	Sabia virus-HIS-4	5′-AGAAAGUUCUAUCAAGUU UUUUU-3′	SEQ ID NO. 208
	Sabia virus-HIS-5	5′-UUUCAAAUUCCUUCUCAG AAUUC-3′	SEQ ID NO. 209
	Sabia virus-HIS-6	5′-AUUUUGUACAGAAGGUUU UCAUAA-3′	SEQ ID NO. 210
	Sabia virus-HIS-7	5′-AUUGAUUAGAAAUUCAAC UUGGAAAAAUCAAUG-3′	SEQ ID NO. 211
	Sabia virus-HIS-8	5′-GGAUGUCUUUGUCUUUCU UUUUCUUUG-3′	SEQ ID NO. 212
Thogoto virus	Thogoto virus-HIS-1	5′-ACACCAAAGGGAAACUCA CUGACAGAAAAC-3′	SEQ ID NO. 213
	Thogoto virus-HIS-2	5′-GACACAGAUGAAGAAACU UCCUUU-3′	SEQ ID NO. 214
	Thogoto virus-HIS-3	5′-UACAACCCAAGAGAGCUU AAAC-3′	SEQ ID NO. 215
	Thogoto virus-HIS-4	5′-AAAGAAUGAAGUAAAGGU CAGCA-3′	SEQ ID NO. 216
	Thogoto virus-HIS-5	5′-GUGCUAUUGAUCAGACUA AUUA-3′	SEQ ID NO. 217
	Thogoto virus-HIS-6	5′-GCUGGACUGUGGUGACAG CCUC-3′	SEQ ID NO. 218
	Thogoto virus-HIS-7	5′-CAACCUCUGCACAAAAUG AGCU-3′	SEQ ID NO. 219
	Thogoto virus-HIS-8	5′-ACAAUGGAGCAUGCAAGG AAGCA-3′	SEQ ID NO. 220
	Thogoto virus-HIS-9	5′-UAGCAGGUAGUAUCCAAG ACAGAGAC-3′	SEQ ID NO. 221
	Thogoto virus-HIS-10	5′-AAAAUGCUGAGGAUAUGG GCAA-3′	SEQ ID NO. 222
	Thogoto virus-HIS-11	5′-CAAUAACCAAAGAGAAAA AAGAA-3′	SEQ ID NO. 223
	Thogoto virus-HIS-12	5′-AAUCAUGGAAGUUGUUUU CCCCA-3′	SEQ ID NO. 224
	Thogoto virus-HIS-13	5′-AAGCAACCAGGAGAUUGG UUCA-3′	SEQ ID NO. 225
	Thogoto virus-HIS-14	5′-AUGCAACUGAGAUCAGAG CAUC-3′	SEQ ID NO. 226
	Thogoto virus-HIS-15	5′-CCAGAGGACAAGAGCUCU UGUU-3′	SEQ ID NO. 227
European trinidad rabies virus 1	European trinidad rabies virus 1-HIS-1	5′-GAGGACGAGAUGGGUGGA UCAAGA-3′	SEQ ID NO. 228
	European trinidad rabies virus 1-HIS-2	5′-GAGGACGAGAUGGGUGGA UCAAGAGGUC-3′	SEQ ID NO. 229
	European bat lyssavirus 1-HIS-3	5′-UUGGCUCAUUCUCUGUUU UUUUUGUUUUUUUU-3′	SEQ ID NO. 230
	European trinidad rabies virus 1-HIS-4	5′-GAGGACGAGAUGGGUGGA UCAAGAGGUC-3′	SEQ ID NO. 231
	European trinidad rabies virus 1-HIS-5	5′-CUCAUUCUCUGUUUUUUU UGUUUUUUUU-3′	SEQ ID NO. 232
European trinidad rabies virus 2	European trinidad rabies virus 2-HIS	5′-CUUUAUUCUAAAAUAUUU UUAAAU-3′	SEQ ID NO. 233
Chapare virus	Chapare virus-HIS	5′-AUGAGCCCAAGACUUCUU UUGAU-3′	SEQ ID NO. 234
Rotavirus	Rotavirus A-HIS-1	5′-AAGAAACUGUGAUUUUUA AUACUUA-3′	SEQ ID NO. 235
	Rotavirus A-HIS-2	5′-AAGAAUGAUAAAGCAAAG AAAA-3′	SEQ ID NO. 236
	Rotavirus A-HIS-3	5′-UACUUUUAAAGAUGCAUG CUUUCAUU-3′	SEQ ID NO. 237
	Rotavirus A-HIS-4	5′-UUUAAAAAAUGAUAAGAA UAAA-3′	SEQ ID NO. 238
	Rotavirus A-HIS-5	5′-AGAAUGAUAAAGCAAAGA AAAUGUAG-3′	SEQ ID NO. 239
	Rotavirus A-HIS-6	5′-UACUGAUCUCCAACUCAG AAGA-3′	SEQ ID NO. 240
	Rotavirus A-HIS-7	5′-AAAAUUUGAAAGAAUGAU AAAGCAAA-3′	SEQ ID NO. 241
	Rotavirus A-HIS-8	5′-AAAAAUGAAUGAAAAUAU GCAUUCUCUUCAAAA-3′	SEQ ID NO. 242
	Rotavirus A-HIS-9	5′-AAAGCAAGAAAAAUGAAU GAAAA-3′	SEQ ID NO. 243
	Rotavirus A-HIS-10	5′-CAAGAAAAAUGAAUGAAA AUAU-3′	SEQ ID NO. 244
	Rotavirus A-HIS-11	5′-AGGAGAAAUCAAAACAAA ACCAUA-3′	SEQ ID NO. 245
	Rotavirus A-HIS-12	5′-GCAUUCAAUAAAUACAUG CUG-3′	SEQ ID NO. 246
	Rotavirus A-HIS-13	5′-AUGUAAGAACUGUAAAUA UAA-3′	SEQ ID NO. 247
	Rotavirus A-HIS-14	5′-AAAACAAAACCAUAAAAG UAG-3′	SEQ ID NO. 248
	Rotavirus A-HIS-15	5′-AAAGGAGAAAUCAAAACA AAACCAUAAAA-3′	SEQ ID NO. 249
	Rotavirus A-HIS-16	5′-UAGGGAGCUCCCCA-	SEQ ID NO. 250

TABLE 1-continued

Target sequence listing of RNA virus			
Virus type	Fragment number	Fragment coding sequence	ID number
		CUCC CGUUUUGUGAC-3′	
	Rotavirus A-HIS-17	5′-UAUAUCAAAAGAAAAUGA AAUCAA-3′	SEQ ID NO. 251
	Rotavirus A-HIS-18	5′-GAUUAAAUUUAUAUCAAA AGAAAAUGAA-3′	SEQ ID NO. 252
	Rotavirus A-HIS-19	5′-UAUAUCAAAAGAAAAUGA AAUCAAUA-3′	SEQ ID NO. 253
	Rotavirus A-HIS-20	5′-AAAGAAAAUGAAAUCAAU AGUUGAGGA-3′	SEQ ID NO. 254
	Rotavirus A-HIS-21	5′-UAUAUCAAAAGAAAAUGA AAUCAAUAG-3′	SEQ ID NO. 255
	Rotavirus A-HIS-22	5′-AUGACCAAAUGUAUAGAU UGAGA-3′	SEQ ID NO. 256
	Rotavirus A-HIS-23	5′-UAUAUCAAAAGAAAAUGA AAUCAAUAGUUGAGGA-3′	SEQ ID NO. 257
	Rotavirus A-HIS-24	5′-UAUAUCAAAAGAAAAUGA AAUCAAUA-3′	SEQ ID NO. 258
	Rotavirus A-HIS-25	5′-UUGAAAUAAGAAGAUUAG AUAUUUUUAAUU-3′	SEQ ID NO. 259
	Rotavirus A-HIS-26	5′-UGAUAUCAUUUUCAAUUA CAUA-3′	SEQ ID NO. 260
	Rotavirus A-HIS-27	5′-AAGAAAAAGAAGAUAGCA AGAA-3′	SEQ ID NO. 261
	Rotavirus A-HIS-28	5′-AGCUAAAGUUUGGUAGGA AAACAA-3′	SEQ ID NO. 262
	Rotavirus A-HIS-29	5′-AAAUCAAGUAAAAUAACA AUAAAUGACAUAC-3′	SEQ ID NO. 263
	Rotavirus A-HIS-30	5′-CAUUAAAUUUAUACAAAC AAACACAAA-3′	SEQ ID NO. 264
	Rotavirus A-HIS-31	5′-AGCUAAAGUUUGGUAGGA AAACAA-3′	SEQ ID NO. 265
	Rotavirus A-HIS-32	5′-GAAAUAUACCAUAUAAAU AUGAUGU-3′	SEQ ID NO. 266
	Rotavirus A-HIS-33	5′-AAAUAAGAUCAGAAUUUU AUUUA-3′	SEQ ID NO. 267
	Rotavirus A-HIS-34	5′-AGAAUUAUAUUAAUACAG UAUA-3′	SEQ ID NO. 268
	Rotavirus A-HIS-35	5′-AGCAUUAAAACAUUAGAA AUAUUAAAUAAG-3′	SEQ ID NO. 269
	Rotavirus A-HIS-36	5′-AGAAUUAUAUUAAUACAG UAUAUAGU-3′	SEQ ID NO. 270
	Rotavirus A-HIS-37	5′-GAAGAAUUAUUCACAUUA AUAA-3′	SEQ ID NO. 271
	Rotavirus A-HIS-38	5′-GAAGAACAAACUAUUAAU AAUU-3′	SEQ ID NO. 272
	Rotavirus A-HIS-39	5′-UAAGAUCAGAAUUUUAUU UAUUACUA-3′	SEQ ID NO. 273
	Rotavirus A-HIS-40	5′-UAAACCAAACAUUUUUCC UUAU-3′	SEQ ID NO. 274
	Rotavirus A-HIS-41	5′-AUUUUAAAACACUUAAAA AUUU-3′	SEQ ID NO. 275
	Rotavirus A-HIS-42	5′-CAAUAUUUCUGCUGUUCA AUUCAAUGG-3′	SEQ ID NO. 276
	Rotavirus A-HIS-43	5′-UUUUUUGGGUUUUGUUUG UGUUGAUACUUUGAG-3′	SEQ ID NO. 277
Tai Forest ebolavirus	Tai Forest ebolavirus-HIS-1	5′-GCAAAUUUAUCUUAAAUU CAAGUACAUA-3′	SEQ ID NO. 278
	Tai Forest ebolavirus-HIS-2	5′-UAACAGACUUGGAAAAAU ACAAUU-3′	SEQ ID NO. 279
Bundibugy o ebolavirus	Bundibugyo ebolavirus-HIS	5′-AUUACCUUCAAAAAUCUA GAACUUUAUUAAUUCUCAG-3'	SEQ ID NO. 280
Rift Valley fever virus	Rift Valley fever virus-HIS	5′-AAAAUUAAAAACAAAAAU GAAAGG-3′	SEQ ID NO. 281
Irkut virus	Irkut virus-HIS-1	5′-CUUAUUUUAUGUCUUCUU UGUUGUUUUU-3′	SEQ ID NO. 282
	Irkut virus-HIS-2	5′-AUUAUUAACAACUUAUUU UUAUUUAAUCUUUUA-3′	SEQ ID NO. 283
	Irkut virus-HIS-3	5′-AUAAAGAAGAAUAUUAAC AUUGACAUUA-3′	SEQ ID NO. 284
	Irkut virus-HIS-4	5′-UUAUGAAUGUUUUAUCAU GAUUAAAGAU-3′	SEQ ID NO. 285
Influenza A virus	Influenza A virus-HIS-1	5′-CCCAGCACAGAGAUGUCA UUGA-3′	SEQ ID NO. 286
	Influenza A virus-HIS-2	5′-AGUGAGAAAUGAUGAUGU UGAUCAGA-3′	SEQ ID NO. 287
	Influenza A virus-HIS-3	5′-UUCUAAGGAAAGCAACCA GAAG-3′	SEQ ID NO. 288
	Influenza A virus-HIS-4	5′-UGAGCAAGAAGAAAUCCU ACAU-3′	SEQ ID NO. 289
	Influenza A virus-HIS-5	5′-GGAAUGAGAAGAAAGCUA AAUU-3′	SEQ ID NO. 290
	Influenza A virus-HIS-6	5′-UUAGAAAUGUCUUAAGCA UUGC-3′	SEQ ID NO. 291
	Influenza A virus-HIS-7	5′-CAGGACAUUGAAAAUGAA GAGAAG-3′	SEQ ID NO. 292
	Influenza A virus-HIS-8	5′-AAGAGAAAGACCUGACCA AAGA-3′	SEQ ID NO. 293
	Influenza A virus-HIS-9	5′-	SEQ ID

TABLE 1-continued

Target sequence listing of RNA virus

Virus type	Fragment number	Fragment coding sequence	ID number
		ACUAAGUCAUAUAAAAAU ACAAGAAAAA-3′	NO. 294
	Influenza A virus-HIS-10	5′-AACAAUUUGAGUUGAUAG ACAAUGAAU-3′	SEQ ID NO. 295
	Influenza A virus-HIS-11	5′-AUCAUGUUUCAUACUUCU AGCCAUUG-3′	SEQ ID NO. 296
	Influenza A virus-HIS-12	5′-GAAACAUACUAAGAACAC AGGAA-3′	SEQ ID NO. 297
	Influenza A virus-HIS-13	5′-UUUCACCAUUACCUUCUC UUCC-3′	SEQ ID NO. 298
	Influenza A virus-HIS-14	5′-AGGAAGCAAAAUUAAACA GAGAAGAAA-3′	SEQ ID NO. 299
	Influenza A virus-HIS-15	5′-UGGAAAAUGAAAGAACUU UGGA-3′	SEQ ID NO. 300
	Influenza A virus-HIS-16	5′-AAAACAACACUUGGGUAA AUCAGACA-3′	SEQ ID NO. 301
	Influenza A virus-HIS-17	5′-GCUGCUGGACAGUCAGUG GUUU-3′	SEQ ID NO. 302
	Influenza A virus-HIS-18	5′-GGAUCAAGAAAGAAGAGU UCUCUGAGA-3′	SEQ ID NO. 303
	Influenza A virus-HIS-19	5′-GGGGAGACACACAAAUUC AGAC-3′	SEQ ID NO. 304
	Influenza A virus-HIS-20	5′-ACCAAAUGAAAACCCAGC UCACAAGAGUCA-3′	SEQ ID NO. 305
	Influenza A virus-HIS-21	5′-AAAUGAGAAUGUGGAAAC CAUG-3′	SEQ ID NO. 306
	Influenza A virus-HIS-22	5′-AGAAAUAAGGAGAGUUUG GCGC-3′	SEQ ID NO. 307
	Influenza A virus-HIS-23	5′-AGAAGAGUAGACGGAAAG UGGA-3′	SEQ ID NO. 308
	Influenza A virus-HIS-24	5′-GACAUUCUUUGGCUGGAA AGAGCCUAA-3′	SEQ ID NO. 309
	Influenza A virus-HIS-25	5′-GAAGAGAGCAGGGCAAGA AUCAAAACUAGGCU-3′	SEQ ID NO. 310
	Influenza A virus-HIS-26	5′-AGGGCAAGCUUUCCCAAA UGUC-3′	SEQ ID NO. 311
	Influenza A virus-HIS-27	5′-GGACAUGAUUCCAGAGAG GAAUGAACAAGGACAA-3′	SEQ ID NO. 312
	Influenza A virus-HIS-28	5′-GGAAAUUGUGAAAAUUCA AUGG-3′	SEQ ID NO. 313
Bayou virus	Bayou virus-HIS-1	5′-GAGUCUACAUUCUCAGUU UUGUC-3′	SEQ ID NO. 314
	Bayou virus-HIS-2	5′-GAGACAGACAGUAAAGGA AAAU-3′	SEQ ID NO. 315
	Bayou virus-HIS-3	5′-UGAAGAAAAACUAAAGAA AAAA-3′	SEQ ID NO. 316
	Bayou virus-HIS-4	5′-CCAGACAGCAGACUGGAA GGCA-3′	SEQ ID NO. 317
	Bayou virus-HIS-5	5′-AACAGGAAAUCAUAUUGA AUUUGU-3′	SEQ ID NO. 318
	Bayou virus-HIS-6	5′-AGUAUGCAUGGAAAGAUU UUCUUAAUG-3′	SEQ ID NO. 319
	Bayou virus-HIS-7	5′-CAGAGUUUGAAUUUUAUG AUCAG-3′	SEQ ID NO. 320
	Bayou virus-HIS-8	5′-UGAGGGUAACAUUUAAUU UUGGG-3′	SEQ ID NO. 321
	Bayou virus-HIS-9	5′-UUUUUUCUUUUUGAGAAA GGGCUUCAU-3′	SEQ ID NO. 322
	Bayou virus-HIS-10	5′-AGAAAACAACAGGUGUUG AUGAG-3′	SEQ ID NO. 323
	Bayou virus-HIS-11	5′-UUUUUUCUUUUUGAGAAA GGGCU-3′	SEQ ID NO. 324
	Bayou virus-HIS-12	5′-AAAUGAAAGAUUUCCAGA AAUUG-3′	SEQ ID NO. 325
	Bayou virus-HIS-13	5′-ACAACAGAUACAACAAAU GCUGGUGAGAAU-3′	SEQ ID NO. 326
	Bayou virus-HIS-14	5′-AGUGAUUCAUGCUGAAAU ACAGU-3′	SEQ ID NO. 327
Kyasanur forest disease virus	Kyasanur forest disease virus-HIS	5′-AUGAGAGAUCUUGGGGGU GGGAC-3′	SEQ ID NO. 328
Black Creek Canal virus	Black Creek Canal virus-HIS-1	5′-CCAAUGUAUUUAUACAUU UACAAGUA-3′	SEQ ID NO. 329
	Black Creek Canal virus-HIS-2	5′-AAGUUCAAUGAGAAAGAG AAUAGAUAUGG-3′	SEQ ID NO. 330
	Black Creek Canal virus-HIS-3	5′-UACUUACAUGCCAAAUCU CAA-3′	SEQ ID NO. 331
	Black Creek Canal virus-HIS-4	5′-AGUUCAAUGAGAAAGAGA AUA-3′	SEQ ID NO. 332
	Black Creek Canal virus-HIS-5	5′-UACAUACUAUUAAUGUGA UUUA-3′	SEQ ID NO. 333
	Black Creek Canal virus-HIS-6	5′-UUUUGUCCUUCCAAUUGU GUUG-3′	SEQ ID NO. 334
Japanese encephalitis virus	Japanese encephalitis virus-HIS-1	5′-GAAGCAGAGAGAAAGUAG AGAAG-3′	SEQ ID NO. 335
	Japanese encephalitis virus-HIS-2	5′-UCAAAAGGAGAGAACAGA UGCUGG-3′	SEQ ID NO. 336
	Japanese encephalitis virus-HIS-3	5′-UCCCUGGAUGGCAAGCAG AAGCA-3′	SEQ ID NO. 337
Duvenhage lyssavirus	Duvenhage lyssavirus-HIS	5′-CCUCUAAGUUUCCUAAGG UUCU-3′	SEQ ID NO. 338
	Human enterovirus D-HIS	5′-AACAAGAGCAGGCCAGUG UGGUGG-3′	SEQ ID NO. 339
	Human enterovirus D-HIS	5′-UUGAGGAAAAGGGAACCC UGUACA-3′	SEQ ID NO. 340

TABLE 1-continued

Target sequence listing of RNA virus

Virus type	Fragment number	Fragment coding sequence	ID number
	Human enterovirus D-HIS	5′-CCAGGCACUGGGAAGUCA GUGGCA-3′	SEQ ID NO. 341
	Human enterovirus D-HIS	5′-AAUUAGGAGUGAUACCUU CACUAA-3′	SEQ ID NO. 342
	Human enterovirus D-HIS	5′-UGAGAAAAAGGCCACUGU CCUUUA-3′	SEQ ID NO. 343
	Human enterovirus D-HIS	5′-ACAAAUUGGAGAAAUAGU GAAAA-3′	SEQ ID NO. 344
Lujo mammarenavirus	Lujo mammarenavirus-HIS	5′-AUUUUAAAACACUUAAAA AUUU-3′	SEQ ID NO. 345
Measles morbillivirus	Measles morbillivirus-HIS	5′-AAAGGAAGAAAUUGAAAC CCAGA-3′	SEQ ID NO. 346
Tick-borne encephalitis virus	Tick-borne encephalitis virus-HIS	5′-GAUGUCAUCAAGAAUGCA GAUGC-3′	SEQ ID NO. 347
Avian influenza virus	Avian influenza virus-CIS-1	5′-ACAAAAGAUGCAGAAAGA GGCAAG-3′	SEQ ID NO. 348
	Avian influenza virus-CIS-2	5′-AAUGUUAUUGAGUAUAUA GAGAGA-3′	SEQ ID NO. 349
	Avian influenza virus-CIS-3	5′-CAUUUGAUGAUCUGGCAU UCCAACU-3′	SEQ ID NO. 350
	Avian influenza virus-CIS-4	5′-GAAGGGAGGCUGAUCCAG AACAGU-3′	SEQ ID NO. 351
	Avian influenza virus-CIS-5	5′-GGCACAACUGGAGUGGAG UCUGCU-3′	SEQ ID NO. 352
	Avian influenza virus-CIS-6	5′-CAAAAGAAAAGAAAGAAG AGCUC-3′	SEQ ID NO. 353
	Avian influenza virus-CIS-7	5′-UCCAAAUUGCUUCAAAUG AAAA-3′	SEQ ID NO. 354
	Avian influenza virus-CIS-8	5′-AAUUGUACAAAAACCCUG AUAC-3′	SEQ ID NO. 355
	Avian influenza virus-CIS-9	5′-AUGAGGAAUGGAGGGAAU AGCU-3′	SEQ ID NO. 356
	Avian influenza virus-CIS-10	5′-AUUGCUCCUUUGCUGGAU GGAU-3′	SEQ ID NO. 357
	Avian influenza virus-CIS-11	5′-UUCCAAUCUGAAUGAUGC AACA-3′	SEQ ID NO. 358
	Avian influenza virus-CIS-12	5′-UAAAAGCUGCAUCAAUAG GUGU-3′	SEQ ID NO. 359
	Avian influenza virus-CIS-13	5′-GGGAGAUUGAUCCAAAAC AGCA-3′	SEQ ID NO. 360
	Avian influenza virus-CIS-14	5′-AGGGGGAAGCCCAGAUCC UGGA-3′	SEQ ID NO. 361
	Avian influenza virus-CIS-15	5′-UGCCACAGAGGAGACACA CAAA-3′	SEQ ID NO. 362
	Avian influenza virus-CIS-16	5′-GAGAAAGGAAAGUGGACA ACA-3′	SEQ ID NO. 363
	Avian influenza virus-CIS-17	5′-CAUAACAACAACAAUAAU AACUGAA-3′	SEQ ID NO. 364
	Avian influenza virus-CIS-18	5′-AGGAAGGGAAAAUACAAA AAAU-3′	SEQ ID NO. 365
	Avian influenza virus-CIS-19	5′-GAGGAAAUGAGAAGAAGG CUA-3′	SEQ ID NO. 366
	Avian influenza virus-CIS-20	5′-CUGGAGCUGCUGGAGCAG CAG-3′	SEQ ID NO. 367
	Avian influenza virus-CIS-21	5′-UCUCAAACUUGCAGUUGG UC-3′	SEQ ID NO. 368
	Avian influenza virus-CIS-22	5′-UUGACUAUGGGAGUGAUG UUU-3′	SEQ ID NO. 369
	Avian influenza virus-CIS-23	5′-AGUUUGAAUUCAUUGCUG AAG-3′	SEQ ID NO. 370
	Avian influenza virus-CIS-24	5′-GAAAAACAAGAUUUCUCC CAGUG-3′	SEQ ID NO. 371
	Avian influenza virus-CIS-25	5′-ACAGGGUGAUGGUGUCCC CC-3′	SEQ ID NO. 372
	Avian influenza virus-MIS-1	5′-AAAUGGACCACAAACACA GAAAC-3′	SEQ ID NO. 373
	Avian influenza virus-MIS-2	5′-AUGUCUUCUUCAAUCACU UCAAC-3′	SEQ ID NO. 374
	Avian influenza virus-MIS-3	5′-UACUGCUAAGGAAGCACA AGAUG-3′	SEQ ID NO. 375
	Avian influenza virus-MIS-4	5′-AAAAAUUGAAACGAACAA AUUC-3′	SEQ ID NO. 376
	Avian influenza virus-MIS-5	5′-AAUAAAUACAACAUUACC CUUU-3′	SEQ ID NO. 377
	Avian influenza virus-MIS-6	5′-AAGCAAGAUUAAAAAGAG AGGA-3′	SEQ ID NO. 378
	Avian influenza virus-MIS-7	5′-UUAGAGCAUCUGUUGGAA GAAU-3′	SEQ ID NO. 379
	Avian influenza virus-MIS-8	5′-AACAGAGGCUGAACAAGA GGA-3′	SEQ ID NO. 380
	Avian influenza virus-MIS-9	5′-UGCAGAAGGAACAGGAAC GGC-3′	SEQ ID NO. 381
	Avian influenza virus-MIS-10	5′-AUUGUAUGGACACAAUUA GAAAC-3′	SEQ ID NO. 382
	Avian influenza virus-MIS-11	5′-AUGAGAAACGUGCCUGAG AAACA-3′	SEQ ID NO. 383
	Avian influenza virus-MIS-12	5′-UGUUUUCUUCUGUCUGAA GA-3′	SEQ ID NO. 384
	Avian influenza virus-MIS-13	5′-CAUAUAAUUAGCAUCACAAU-3′	SEQ ID NO. 385
	Avian influenza virus-MIS-14	5′-ACAAAUCAGCAGUUUGAA CUGAUA-3′	SEQ ID NO. 386
	Avian influenza virus-MIS-15	5′-GAAAGAGGUAAAUUAAAA AG-3′	SEQ ID NO. 387
	Avian influenza virus-MIS-16	5′-AAGUAGCAGGCUCACUCU GC-3′	SEQ ID NO. 388
	Avian influenza virus-MIS-17	5′-AGAAGGAGAGAAG-	SEQ ID NO. 389

TABLE 1-continued

Target sequence listing of RNA virus

Virus type	Fragment number	Fragment coding sequence	ID number
		GAAAA UGG-3′	
	Avian influenza virus-MIS-18	5′-ACAAAUACCUGCAGAAAU GC-3′	SEQ ID NO. 390
	Avian influenza virus-MIS-19	5′-AAUGAAUCAACAAGAAAG AAAA-3′	SEQ ID NO. 391
	Avian influenza virus-MIS-20	5′-AAUGAAUCAACAAGAAAG AA-3′	SEQ ID NO. 392
	Avian influenza virus-MIS-21	5′-GAGAAUGAAGAGAAAACU CC-3′	SEQ ID NO. 393
	Avian influenza virus-MIS-22	5′-AUUCAGUGAAAUUGGAAA AU-3′	SEQ ID NO. 394
	Avian influenza virus-MIS-23	5′-AGAAAUACACCAAGACCA CAUA-3′	SEQ ID NO. 395
	Avian influenza virus-MIS-24	5′-CUUGAACUUAGAAGCAGA UAU-3′	SEQ ID NO. 396
	Avian influenza virus-MIS-25	5′-ACAAUGCUAUCAAUUGUA AUC-3′	SEQ ID NO. 397
	Avian influenza virus-MIS-26	5′-ACAAUGCUAUCAAUUGUAAU-3′	SEQ ID NO. 398
	Avian influenza virus-MIS-27	5′-GAACUUCAGGACAUAGAA AAU-3′	SEQ ID NO. 399
	Avian influenza virus-MIS-28	5′-GCCUUCCUUUCCAGAAUG UG-3′	SEQ ID NO. 400
	Avian influenza virus-MIS-29	5′-GAUAUGACUUUGAAAGGG AG-3′	SEQ ID NO. 401
	Avian influenza virus-MIS-30	5′-AGGGGUUGGAAUGGCUGC AG-3′	SEQ ID NO. 402
	Avian influenza virus-HIS-1	5′-CAGAGUAGAAUGCAAUUC UCCUCA-3′	SEQ ID NO. 403
	Avian influenza virus-HIS-2	5′-UUCCUGCUUUACCAUAAU GACUGA-3′	SEQ ID NO. 404
	Avian influenza virus-HIS-3	5′-UUUCAUAAUGUCAGCAAA UAUGCA-3′	SEQ ID NO. 405
	Avian influenza virus-HIS-4	5′-GGUCUACAAAACAUACUU UGAGAA-3′	SEQ ID NO. 406
	Avian influenza virus-HIS-5	5′-CAAAAUUAGAGAGACAGA AAAUAGA-3′	SEQ ID NO. 407
	Avian influenza virus-HIS-6	5′-GAAGCAAAACUGUUUGUG CU-3′	SEQ ID NO. 408
	Avian influenza virus-HIS-7	5′-UUGUUUUUAUGUGGAGCU AAUCA-3′	SEQ ID NO. 409
	Avian influenza virus-HIS-8	5′-CACAAAGGACAAUAGGAA AGAAA-3′	SEQ ID NO. 410
	Avian influenza virus-HIS-9	5′-UAAAGAAAUUGAAUCAGU AAAUAA-3′	SEQ ID NO. 411
	Avian influenza virus-HIS-10	5′-AGUGAGACACAGGGAACA GAGAAA-3′	SEQ ID NO. 412
	Avian influenza virus-HIS-11	5′-CAUAUGAAAGAAUGUGCA ACAUC-3′	SEQ ID NO. 413
	Avian influenza virus-HIS-12	5′-UUCAAUGAAUCAACAAAA AAGAAA-3′	SEQ ID NO. 414
	Avian influenza virus-HIS-13	5′-CAGCAGAUAAAAGAAUAA UGGAAAUG-3′	SEQ ID NO. 415
	Avian influenza virus-HIS-14	5′-AGUUGAUAAUAACAACUG GUCUGGU-3′	SEQ ID NO. 416
	Avian influenza virus-HIS-15	5′-AGAAGAAGAAAAAGAGGA CUAUUU-3′	SEQ ID NO. 417
	Avian influenza virus-HIS-16	5′-CUUCCCAGUUUUGGAGUG UCUGGGAU-3′	SEQ ID NO. 418
	Avian influenza virus-HIS-17	5′-AAAUUUAAAUAAGAAAAU GGAAGAU-3′	SEQ ID NO. 419
	Avian influenza virus-HIS-18	5′-AAUCUAAUGGGAAUUUAA UAGCUC-3′	SEQ ID NO. 420
Swine influenza virus	Swine influenza virus-PIS-1	5′-AUGCAGAACUUUCUUUUU GACUC-3′	SEQ ID NO. 421
	Swine influenza virus-PIS-2	5′-ACAUUCUUUUCAUGUGGG GCAUAA-3′	SEQ ID NO. 422
	Swine influenza virus-PIS-3	5′-CUAGUCAGGCUAGGCAGA UGGU-3′	SEQ ID NO. 423
	Swine influenza virus-PIS-4	5′-CAAAGCAGAAUGCAGUUC UCLTCT-3′	SEQ ID NO. 424
	Swine influenza virus-PIS-5	5′-UGCACCAAUUAAAAUACA GAUAU-3′	SEQ ID NO. 425
	Swine influenza virus-PIS-6	5′-AGAGUAAGAGACAACAUG ACCA-3′	SEQ ID NO. 426
	Swine influenza virus-PIS-7	5′-GGGAAUUGGGACAAUGGU GAUG-3′	SEQ ID NO. 427
	Swine influenza virus-PIS-8	5′-AAUGCCUUGUUUCUACUA AUAC-3′	SEQ ID NO. 428
	Swine influenza virus-PIS-9	5′-UAAGAGGAUCAGGAAUGA GAAU-3′	SEQ ID NO. 429
	Swine influenza virus-PIS-10	5′-AUCUCAUUUAAGGAAUGA CACA-3′	SEQ ID NO. 430
	Swine influenza virus-PIS-11	5′-AGACAAUGCUAAGGAAAU AGGG-3′	SEQ ID NO. 431
	Swine influenza virus-PIS-12	5′-AAAGCAAUGAAAGAGUAU GGGGAG-3′	SEQ ID NO. 432
	Swine influenza virus-PIS-13	5′-UUGGUCUGAGGAAUGUGC CUGCU-3′	SEQ ID NO. 433
	Swine influenza virus-PIS-14	5′-AUCAAUGAACAAAGAGGA AAUA-3′	SEQ ID NO. 434
	Swine influenza virus-PIS-15	5′-CAGAGAGAGGCAAAUUAA AAAG-3′	SEQ ID NO. 435
	Swine influenza virus-PIS-16	5′-CACAAAUUGAAGAUGACA GAGA-3′	SEQ ID NO. 436
	Swine influenza virus-PIS-17	5′-AAACAAGAAGUGCUUAUG AGAG-3′	SEQ ID NO. 437
	Swine influenza virus-PIS-18	5′-ULTUULTUUCAAAUGCAUCU AUCAA-3′	SEQ ID NO. 438
	Swine influenza virus-PIS-19	5′-CAGAAAUUCGAAGAAAUA AAAUG-3′	SEQ ID NO. 439
	Swine influenza virus-PIS-20	5′-CAGCCUAAUCAGAC-	SEQ ID NO. 440

TABLE 1-continued

Target sequence listing of RNA virus

Virus type	Fragment number	Fragment coding sequence	ID number
		CAAA UGAA-3′	
	Swine influenza virus-PIS-21	5′-GGACGGAUUAAGAAAGAA GAGU-3′	SEQ ID NO. 441
	Swine influenza virus-PIS-22	5′-UGGAGUUGAUAAGGGGAA GGGA-3′	SEQ ID NO. 442
	Swine influenza virus-PIS-23	5′-ACAGAUUUGAAAUAAUUG AAGG-3′	SEQ ID NO. 443
	Swine influenza virus-PIS-24	5′-UGCAUGUGUAAAUGGCUC UUG-3′	SEQ ID NO. 444
	Swine influenza virus-PIS-25	5′-CUUUUCCUGAAAGUGCCA GCA-3′	SEQ ID NO. 445
	Swine influenza virus-PIS-26	5′-AAGACAAGAAAUGGCCAG UAGG-3′	SEQ ID NO. 446
	Swine influenza virus-PIS-27	5′-CUGCAUUUGAAGAUUUAA GAUUG-3′	SEQ ID NO. 447
	Swine influenza virus-PIS-28	5′-CCAUUAUCCAAAGGUCUA CAAA-3′	SEQ ID NO. 448
	Swine influenza virus-PIS-29	5′-UGAGACUUCCAAGAUCAA GAUG-3′	SEQ ID NO. 449
	Swine influenza virus-PIS-30	5′-GCAGGAGUGGAUAGAUUC UACA-3′	SEQ ID NO. 450
	Swine influenza virus-PIS-31	5′-AAAGCAAAUUGUAGAAAA GAUU-3′	SEQ ID NO. 451
	Swine influenza virus-PIS-32	5′-UGCAGGGAAGAACACAGA UCUC-3′	SEQ ID NO. 452
	Swine influenza virus-PIS-33	5′-UCAAAUGCAUGAAGACAU UCLTCT-3′	SEQ ID NO. 453
	Swine influenza virus-PIS-34	5′-AGAAGUUAUAAGGAUGAU GGA-3′	SEQ ID NO. 454
	Swine influenza virus-PIS-35	5′-CUGCCCCAUCGGUGAAGC UCC-3′	SEQ ID NO. 455
	Swine influenza virus-PIS-36	5′-AAUACCAGCCUUCCAUUU CAGAAU-3′	SEQ ID NO. 456
	Swine influenza virus-PIS-37	5′-AAUGAAUCCAAAUCAAAG GA-3′	SEQ ID NO. 457
	Swine influenza virus-PIS-38	5′-AUGCCUUGUUUCUACUAA UAC-3′	SEQ ID NO. 458
	Swine influenza virus-PIS-39	5′-UGAGUUGCCAUUCACCAU UGA-3′	SEQ ID NO. 459
	Swine influenza virus-PIS-40	5′-AUACAUUGAAGUUUUACA UUU-3′	SEQ ID NO. 460
	Swine influenza virus-PIS-41	5′-GUGUGAUGGGAAUGGUUG GAGUAU-3′	SEQ ID NO. 461
	Swine influenza virus-PIS-42	5′-AUAUGCACAAACAGAAUG UGU-3′	SEQ ID NO. 462
	Swine influenza virus-PIS-43	5′-UGGAUUUGUUGCCAAUUU CA-3′	SEQ ID NO. 463
	Swine influenza virus-PIS-44	5′-AUUAUAAAAGGAAGGUCU CA-3′	SEQ ID NO. 464
	Swine influenza virus-PIS-45	5′-CCAAAGAGGGAAGACGAAAG-3′	SEQ ID NO. 465
	Swine influenza virus-HIS-1	5′-UAUAUAAAUAGAACAGGA ACAU-3′	SEQ ID NO. 466
	Swine influenza virus-HIS-2	5′-ACAAUAAAAAGUUGGAGA AACA-3′	SEQ ID NO. 467
	Swine influenza virus-HIS-3	5′-AAAGCCAUGGAACAAAUG GCUG-3′	SEQ ID NO. 468
	Swine influenza virus-HIS-4	5′-GGUCUACAAAACAUACUU UGAGAAA-3′	SEQ ID NO. 469
	Swine influenza virus-HIS-5	5′-AAUAGUUUACUUGAAUAA UACA-3′	SEQ ID NO. 470
	Swine influenza virus-HIS-6	5′-UUCAAGAUGGAGAAAGGG AAGA-3′	SEQ ID NO. 471
	Swine influenza virus-HIS-7	5′-AAAAGAAAUACACCAAAA CAGU-3′	SEQ ID NO. 472
	Swine influenza virus-HIS-8	5′-AACCUAAAUUUCUCCCAG ALTUU-3′	SEQ ID NO. 473
	Swine influenza virus-HIS-9	5′-ACAACCUACUUUCUCAGU ACAGA-3′	SEQ ID NO. 474
	Swine influenza virus-HIS-10	5′-AAAUUCAAACAAGGAGAU CALTU-3′	SEQ ID NO. 475
	Swine influenza virus-HIS-11	5′-UGGUCAGGUUAUUCUGGC ALTUU-3′	SEQ ID NO. 476
	Swine influenza virus-HIS-12	5′-CAACCUGGAACCUGGAAC CU-3′	SEQ ID NO. 477
	Swine influenza virus-HIS-13	5′-CCAGCACUGAGAGGGUGA CUGU-3′	SEQ ID NO. 478
	Swine influenza virus-HIS-14	5′-GAAAUCAACCUGAAUGGU UU-3′	SEQ ID NO. 479
	Swine influenza virus-HIS-15	5′-UUAUCAAAUACUUGCUAU AUAC-3′	SEQ ID NO. 480
	Swine influenza virus-HIS-16	5′-CUUUUCUUAAAAAUUCCA GCGC-3′	SEQ ID NO. 481
	Swine influenza virus-HIS-17	5′-AGAGAAGGAUAUUCUCUG GUC-3′	SEQ ID NO. 482
	Swine influenza virus-HIS-18	5′-GGGGAGACACACAAAUUC AGAC-3′	SEQ ID NO. 483
	Swine influenza virus-HIS-19	5′-UGAUUAUUGCUGCUAGAA ACAUA-3′	SEQ ID NO. 484
	Swine influenza virus-HIS-20	5′-UGAUUAUUGCUGCUAGAA ACAU-3′	SEQ ID NO. 485
	Swine influenza virus-HIS-21	5′-UGGAGAAAGCCAACAAGA UAAAA-3′	SEQ ID NO. 486
	Swine influenza virus-HIS-22	5′-ACAAAGAACAUGAAAAAA ACAAG-3′	SEQ ID NO. 487
	Swine influenza virus-HIS-23	5′-AGGGCAAGCUUUCCCAAA UGUCU-3′	SEQ ID NO. 488
	Swine influenza virus-HIS-24	5′-AGGGCAAGCUUUCCCAAA UGUC-3′	SEQ ID NO. 489
	Swine influenza virus-HIS-25	5′-CCAAAACUACAUACUGGU GGGA-3′	SEQ ID NO. 490

TABLE 1-continued

Target sequence listing of RNA virus

Virus type	Fragment number	Fragment coding sequence	ID number
	Swine influenza virus-HIS-26	5′-AGGCAAAGUGGUGUGUGU GUGC-3′	SEQ ID NO. 491
	Swine influenza virus-HIS-27	5′-UCAAAGAGAAAGACAUGA CCA-3′	SEQ ID NO. 492
	Swine influenza virus-HIS-28	5′-ACUUUGUAAUCCCAUGAA UCC-3′	SEQ ID NO. 493
	Swine influenza virus-HIS-29	5′-UUUCAGGCAGAAUGAAUG CAG-3′	SEQ ID NO. 494
	Swine influenza virus-HIS-30	5′-GAAACACAGGGAACAGAG AAA-3′	SEQ ID NO. 495
	Swine influenza virus-HIS-31	5′-AAGGAAGAUCUCAUUUGA GGA-3′	SEQ ID NO. 496
	Swine influenza virus-HIS-32	5′-GAUAGUAAGUGGAAGAGA UGAA-3′	SEQ ID NO. 497
	Swine influenza virus-HIS-33	5′-CAUAUGAAAGAAUGUGCA ACAU-3′	SEQ ID NO. 498
	Swine influenza virus-HIS-34	5′-AUAAUACUAGUAGUAACA GUAA-3′	SEQ ID NO. 499
	Swine influenza virus-HIS-35	5′-UUGACUGAAGAUCCAGAU GAA-3′	SEQ ID NO. 500
	Swine influenza virus-HIS-36	5′-AAAAAUGAUGACCAAUUC UCA-3′	SEQ ID NO. 501
	Swine influenza virus-HIS-37	5′-UAUGGAAUUCUCUCUUAC UGA-3′	SEQ ID NO. 502
	Swine influenza virus-HIS-38	5′-AAAAAACAAAGAUUGAGU AAGA-3′	SEQ ID NO. 503
	Swine influenza virus-HIS-39	5′-AAGCAACCAGGAGAUUGG UUCA-3′	SEQ ID NO. 504
	Swine influenza virus-HIS-40	5′-CCAGAGGACAAGAGCUCU UGUU-3′	SEQ ID NO. 505
	Swine influenza virus-HIS-41	5′-GAAAGAACAUUCUUUUCA UGUG-3′	SEQ ID NO. 506
	Swine influenza virus-HIS-42	5′-CUGUAAUGAGAAUGGGAG ACCU-3′	SEQ ID NO. 507
	Swine influenza virus-HIS-43	5′-GGAAAUUGUGAAAAUUCA AUGG-3′	SEQ ID NO. 508
	Swine influenza virus-HIS-44	5′-UUUUGCUUUGUGUUGUUU UGCUG-3′	SEQ ID NO. 509
	Swine influenza virus-HIS-45	5′-AGGACUUCGAGAAAUAUG UUGA-3′	SEQ ID NO. 510
	Swine influenza virus-HIS-46	5′-AAACAACAUAACAACAAC AAUAA-3′	SEQ ID NO. 511
	Swine influenza virus-HIS-47	5′-AAAAUGCUGAGGAUAUGG GCAA-3′	SEQ ID NO. 512
	Swine influenza virus-HIS-48	5′-UUUCACCAUUACCUUCUC UUCC-3′	SEQ ID NO. 513
	Swine influenza virus-HIS-49	5′-UCUUAUUUCUUCAGAGAC AAUG-3′	SEQ ID NO. 514
	Swine influenza virus-HIS-50	5′-AGAGAAAAUACUUGAAAA UUGUG-3′	SEQ ID NO. 515
	Swine influenza virus-HIS-51	5′-ACAGAAAUGUCACUGAGA GGAG-3′	SEQ ID NO. 516
	Swine influenza virus-HIS-52	5′-AAAGGGGGUAGGGACAAU GGUG-3′	SEQ ID NO. 517
	Swine influenza virus-HIS-53	5′-GACUACAGAUAUACAUAU AGAU-3′	SEQ ID NO. 518
	Swine influenza virus-HIS-54	5′-GAAAAAGGAGAGUGAGAG ACAA-3′	SEQ ID NO. 519
	Swine influenza virus-HIS-55	5′-UAGAUAUAAAUGUGAAAG AUUA-3′	SEQ ID NO. 520
	Swine influenza virus-HIS-56	5′-UCAGACAGCUGCCCAGAG GGCA-3′	SEQ ID NO. 521
Rabies virus	Rabies virus-DIS-1	5′-ACUUACCAGUCUCAUCUU CUA-3′	SEQ ID NO. 522
	Rabies virus-DIS-2	5′-UUUUCUAUCCCUCAGAAA AUCC-3′	SEQ ID NO. 523
	Rabies virus-DIS-3	5′-CUUUGAUCUCGGGCUUGA GA-3′	SEQ ID NO. 524
	Rabies virus-DIS-4	5′-UCUCUCUGCCUUGUAGUU GG-3′	SEQ ID NO. 525
	Rabies virus-DIS-5	5′-UAUAACUUAUUACUUCAGAA-3′	SEQ ID NO. 526
	Rabies virus-DIS-6	5′-AGAAAUCAUAUCAAAUCC UU-3′	SEQ ID NO. 527
	Rabies virus-DIS-7	5′-UUCAGACAGAUCAGACCU CA-3′	SEQ ID NO. 528
	Rabies virus-DIS-8	5′-AAUAUCCAGAAUGGUUUC UG-3′	SEQ ID NO. 529
	Rabies virus-DIS-9	5′-AAGUCAACAUGAAAAAAA CAG-3′	SEQ ID NO. 530
	Rabies virus-DIS-10	5′-UGAAAAAAACAAGAUCUU AA-3′	SEQ ID NO. 531
	Rabies virus-DIS-11	5′-GGGGGGUUCUUUUUGAAAAA-3′	SEQ ID NO. 532
	Rabies virus-DIS-12	5′-GAGAUGGCCAAGGUGGGA GA-3′	SEQ ID NO. 533
	Rabies virus-DIS-13	5′-UUUUUACCAAUAGUAGAG GG-3′	SEQ ID NO. 534
	Rabies virus-DIS-14	5′-GUGCUCCUCAUGAAAUGU CUGU-3′	SEQ ID NO. 535
	Rabies virus-DIS-15	5′-UACCACCUUAAAUAUCAG AG-3′	SEQ ID NO. 536
	Rabies virus-DIS-16	5′-CUCAGCCAUAAAAAUGAA CG-3′	SEQ ID NO. 537
	Rabies virus-DIS-17	5′-AUUGCAGAAAGUUUCUCC AAAA-3′	SEQ ID NO. 538
	Rabies virus-DIS-18	5′-AGACUGGACCAGCUAUGG AAUC-3′	SEQ ID NO. 539
	Rabies virus-DIS-19	5′-AUGUAAUCACCUUAUACA UGAAC-3′	SEQ ID NO. 540
	Rabies virus-DIS-20	5′-GGAAGGACUUGGUAAAGU UC-3′	SEQ ID NO. 541
	Rabies virus-DIS-21	5′-AAAUCCUGAGGCACUUCA ACAU-3′	SEQ ID NO. 542

TABLE 1-continued

Target sequence listing of RNA virus			
Virus type	Fragment number	Fragment coding sequence	ID number
	Rabies virus-DIS-22	5′-GUCUGUCAUCUCACUGGA UC-3′	SEQ ID NO. 543
	Rabies virus-DIS-23	5′-UGGGCACAGUUGUCACUG CU-3′	SEQ ID NO. 544
	Rabies virus-DIS-24	5′-AAACAUUGCAGACAGGAU AG-3′	SEQ ID NO. 545
	Rabies virus-DIS-25	5′-UGUAAUUCUAGCCUGAGU CU-3′	SEQ ID NO. 546
	Rabies virus-DIS-26	5′-CCAGGAAAGUCUUCAGAG GAU-3′	SEQ ID NO. 547
	Rabies virus-DIS-27	5′-UAAAAGAUCUUUUCUUGU CU-3′	SEQ ID NO. 548
	Rabies virus-DIS-28	5′-AGACAAAUAAGGUCAGGA GA-3′	SEQ ID NO. 549
	Rabies virus-DIS-29	5′-AGACAACACCCACUCCUU CU-3′	SEQ ID NO. 550
	Rabies virus-DIS-30	5′-UAGGUUCAAGUCUGCCAG AUACA-3′	SEQ ID NO. 551
	Rabies virus-DIS-31	5′-CUUACCAGUCUCAUCUUC UAC-3′	SEQ ID NO. 552
	Rabies virus-DIS-32	5′-GGCCUUGCUCUUCAGAGA GG-3′	SEQ ID NO. 553
	Rabies virus-DIS-33	5′-CAUGCAGCUAGAACCAUG AC-3′	SEQ ID NO. 554
	Rabies virus-DIS-34	5′-GGGGAAGAAAAGUGGUAG GCA-3′	SEQ ID NO. 555
	Rabies virus-DIS-35	5′-ACAGGAUAGAGCAGAUUU UU-3′	SEQ ID NO. 556
	Rabies virus-DIS-36	5′-UUGAAAAUGAACCUUGAU GA-3′	SEQ ID NO. 557
	Rabies virus-DIS-37	5′-CAUGAGCAAGAUCUUUGU CAA-3′	SEQ ID NO. 558
	Rabies virus-DIS-38	5′-UCUUGUGACAUUUUUACC AAU-3′	SEQ ID NO. 559
	Rabies virus-DIS-39	5′-CAGGAACACAAGAACCAAAG-3′	SEQ ID NO. 560
	Rabies virus-DIS-40	5′-UUCACAUUAAAAAAGUGA UA-3′	SEQ ID NO. 561
	Rabies virus-DIS-41	5′-CUGUUGGAAUGGCCAGGA UG-3′	SEQ ID NO. 562
	Rabies virus-DIS-42	5′-AAGGUGGAGAACUCAGAG UUU-3′	SEQ ID NO. 563
	Rabies virus-DIS-43	5′-GCAUUUGGAAGGUAUCUU GC-3′	SEQ ID NO. 564
	Rabies virus-DIS-44	5′-CUCUAUUUCUUGCACUUG UG-3′	SEQ ID NO. 565
	Rabies virus-DIS-45	5′-AAGAAGAGACCAUGUGUA GUUAU-3′	SEQ ID NO. 566
	Rabies virus-DIS-46	5′-AUAAUGCAUUUGGAAGGU AU-3′	SEQ ID NO. 567
	Rabies virus-DIS-47	5′-CUAUGAAGUCAUCAAAAU AU-3′	SEQ ID NO. 568
	Rabies virus-DIS-48	5′-UUCUCAUUUUUGUUGUUU AUUU-3′	SEQ ID NO. 569
	Rabies virus-DIS-49	5′-AUAACAGACCUAUAACUU AU-3′	SEQ ID NO. 570
	Rabies virus-DIS-50	5′-AGAGAGACACAAGGCUAA GA-3′	SEQ ID NO. 571
	Rabies virus-DIS-51	5′-UUAGUCCAGAGAGCAGAAAA-3′	SEQ ID NO. 572
	Rabies virus-DIS-52	5′-CACUGCCUCCUUCAGCAA UCA-3′	SEQ ID NO. 573
	Rabies virus-DIS-53	5′-UAUGAAGUCAUCAAAAUA UU-3′	SEQ ID NO. 574
	Rabies virus-DIS-54	5′-CAUUAAAAAAGUGAUAGA UA-3′	SEQ ID NO. 575
	Rabies virus-DIS-55	5′-AGAGAGCAUCCAAAGGGA GUG-3′	SEQ ID NO. 576
	Rabies virus-DIS-56	5′-AAAAAAUGUACCAGGUGU GA-3′	SEQ ID NO. 577
	Rabies virus-DIS-57	5′-AACAUGAGCAAGAUCUUU GU-3′	SEQ ID NO. 578
	Rabies virus-DIS-58	5′-AAUCACAUUCUUUCACCA GAA-3′	SEQ ID NO. 579
	Rabies virus-DIS-59	5′-CCUCACUCUUAUUUCAUC CA-3′	SEQ ID NO. 580
	Rabies virus-DIS-60	5′-CAUUCACUUUGUAGGAUG CU-3′	SEQ ID NO. 581
	Rabies virus-HIS-1	5′-AUCAGAAAGGCUUUAUAU GAC-3′	SEQ ID NO. 582
	Rabies virus-HIS-2	5′-UGUAUUUAUAAAAGACAA GGU-3′	SEQ ID NO. 583
	Rabies virus-HIS-3	5′-CUCAUUUUUGUUGUUUAU UU-3′	SEQ ID NO. 584
	Rabies virus-HIS-4	5′-UGCCAAGCUUGUGUUCAA CA-3′	SEQ ID NO. 585
	Rabies virus-HIS-5	5′-UGGGCUCUGACAGGAGGC AUG-3′	SEQ ID NO. 586
	Rabies virus-HIS-	5′-AAGUUAAUUACCUUUACA UU-3′	SEQ ID NO. 587
	Rabies virus-HIS-7	5′-UACUAUGAUGUAUCUAUC UA-3′	SEQ ID NO. 588
	Rabies virus-HIS-8	5′-AGGAGGGUAUUCUUCUGU AU-3′	SEQ ID NO. 589
	Rabies virus-HIS-9	5′-GAACCCAGAGGAACCCCC AC-3′	SEQ ID NO. 590
	Rabies virus-HIS-10	5′-CACUGCCUCCUUCAGCAA UCA-3′	SEQ ID NO. 591
	Rabies virus-HIS-11	5′-AGAGCUCAAGAAGGAGAC AA-3′	SEQ ID NO. 592
	Rabies virus-HIS-12	5′-AAGAGGGGCUCCUCUAUG AA-3′	SEQ ID NO. 593
	Rabies virus-HIS-13	5′-UCUACUGCUUUAGGUGAC GU-3′	SEQ ID NO. 594

TABLE 1-continued

Target sequence listing of RNA virus

Virus type	Fragment number	Fragment coding sequence	ID number
	Rabies virus-HIS-14	5′-AGAUGGGUGGAUCAAGAG GU-3′	SEQ ID NO. 595
	Rabies virus-HIS-15	5′-AACGGUGACGAGGCUGAG GA-3′	SEQ ID NO. 596
	Rabies virus-HIS-16	5′-CAGAGGAUGUAUUUUCUG UC-3′	SEQ ID NO. 597
	Rabies virus-HIS-17	5′-CACAUCCACUGCCUCCUU CA-3′	SEQ ID NO. 598
	Rabies virus-HIS-18	5′-AGGGAUGUCUUGUGACAU UUUU-3′	SEQ ID NO. 599
	Rabies virus-HIS-19	5′-CUUCAGAAAGCAAGUCAU UCUA-3′	SEQ ID NO. 600
	Rabies virus-HIS-20	5′-UACAUCUCAGCCAUAAAA AUG-3′	SEQ ID NO. 601
	Rabies virus-HIS-21	5′-UUACUGAGUGCAGGGGCC CUGA-3′	SEQ ID NO. 602
	Rabies virus-HIS-22	5′-UCAACUUUCCCAACCCUC CA-3″	SEQ ID NO. 603
	Rabies virus-HIS-23	5′-CAGAGGGACAGGGAGGGA GGU-3′	SEQ ID NO. 604
	Rabies virus-HIS-24	5′-AGUCAGAACUUGGAAUGA GAU-3′	SEQ ID NO. 605
	Rabies virus-HIS-25	5′-UCAAAGAUUAGAGUCAAC AGA-3′	SEQ ID NO. 606
	Rabies virus-HIS-26	5′-CAUGAACUGGGUAUACAA GLTU-3′	SEQ ID NO. 607
	Rabies virus-HIS-27	5′-CUGAUGACAUGCUGGAGA AGA-3′	SEQ ID NO. 608
	Rabies virus-HIS-28	5′-UGGUCACGUGUUCAAUCU CAU-3′	SEQ ID NO. 609
	Rabies virus-HIS-29	5′-UUAUGAAGACUGUUCAGG ACU-3′	SEQ ID NO. 610
	Rabies virus-HIS-30	5′-CUGGUGGAGAUAAAACGU ACUGA-3′	SEQ ID NO. 611
	Rabies virus-HIS-31	5′-UUGAUUGUUUUUCUCAUU UU-3′	SEQ ID NO. 612
	Rabies virus-HIS-32	5′-UGGUUUCUGGGGCUGUGC CUC-3′	SEQ ID NO. 613
	Rabies virus-HIS-33	5′-GAGCCAGGGCAGGAGACA GC-3	SEQ ID NO. 614
	Rabies virus-HIS-34	5′-GGGUUCUUUUUGAAAAAAAA-3′	SEQ ID NO. 615

TABLE 2

Antisense sequence listing of the target of the RNA virus

Antisense fragment coding sequence	ID number
3′-ACAGAUACGAUUACCUCCAUUUCCGA-5′	SEQ ID NO. 712
3′-AUAUUGUGUAUAUUUUUAUGCACA-5′	SEQ ID NO. 713
3′-AAUAUACGGAAUAAAGAAAUGAAA-5′	SEQ ID NO. 714
3′-UCCUCUUACUGUUUUUUUUUUUUUUUU-5′	SEQ ID NO. 715
3′-AACAACGACGAUAAAAGAUAAAUU-5′	SEQ ID NO. 716
3′-GUACUUCUUUGUUAAAUAUUAAAUGAAU-5′	SEQ ID NO. 717
3′-CUCAACUCCUUCUUCUUCUCCUUCUGACC-5′	SEQ ID NO. 718
3′-AUUGUACGAAUCCUAUUACCGGAG-5′	SEQ ID NO. 719
3′-UCCUCUUACUGUUUUUUUUUUUUUUUU-5′	SEQ ID NO. 720
3 ‘-AAGGUAAACGUGUCUCAUAGAAAA-5’	SEQ ID NO. 721
3′-ACGACAUUAACGACAACAACGACGACAA-5′	SEQ ID NO. 722
3′-CUUUUUCUCUUUUCUUUGUUCCC-5′	SEQ ID NO. 723
3′-CCCUCCUCCCUCCUUCUCUGAGG-5′	SEQ ID NO. 724
3 ‘-CAAGAUCUCUACGUUCUGAACAC-5’	SEQ ID NO. 725
3 ‘-UGAGUAAGAUGGUAAAAAAUUUAAC-5’	SEQ ID NO. 726
3 ‘-UCUAGGACACUGAAGACCUGAAAA-5’	SEQ ID NO. 727
3′-UUUAUAAUAAAAAUUUUAAAUGAA-5′	SEQ ID NO. 728
3 ‘-UGAAAAAUUUUCUUUUCCCCCCU-5’	SEQ ID NO. 729
3′-CUUUUCCUUCCCUUUUAAAGUUU-5′	SEQ ID NO. 730
3′-UUUACUUGUUCAUCUAUUUAAUC-5′	SEQ ID NO. 731
3′-UUUAAUACCAUGGUCAAUCUCUUU-5′	SEQ ID NO. 732
3′-CUUUCUUUUUUAUAUUUAAUUUU-5′	SEQ ID NO. 733
3′-UAAAUAGUUCUCGGUAAAUUUUU-5′	SEQ ID NO. 734
3′-AUUUUGUCCCUGGUUUUCUUGGCA-5′	SEQ ID NO. 735
3′-UCUUAGUCUAUUCAUCUUAAUCU-5′	SEQ ID NO. 736
3′-UCCGUCUCCUUCUACUCCGGUUG-5′	SEQ ID NO. 737
3′-AUAGUUUUUUAAUUCUUUUCCAAU-5′	SEQ ID NO. 738
3′-CCUAGUCACCUCUUUCACUCCUCCUACU-5′	SEQ ID NO. 739
3′-UACUCUCUAGAACCCCCACCCUG-5′	SEQ ID NO. 740
3′-CUUUUUGAGUUCUACUUUCCUUA -5′	SEQ ID NO. 741
3′-UAACUAACCGAAUUCCUCUUUUAU-5′	SEQ ID NO. 742
3′-UUAACAAAUGGAUAAAUAACCAAAACAC-5′	SEQ ID NO. 743
3′-GACACGACUUGGUCCUGGUCCU-5′	SEQ ID NO. 744
3′-UCUACUUCGUCAGUGGUUGGCG-5′	SEQ ID NO. 745
3′-UAAUCUAAAGUUGUGUCCACGAUGUAG-5′	SEQ ID NO. 746
3′-AACCUUACAAAACGAGGAGAAAU-5′	SEQ ID NO. 747
3′-CUUUAAAAUAAUAAAACAAGUCA-5′	SEQ ID NO. 748
3′-AAUCGAUCUAAAUGUCUAAACCU-5′	SEQ ID NO. 749
3′-UUGUUCUCGUCCGGUCACACCACC-5′	SEQ ID NO. 750
3′-AACUCCUUUUCCCUUGGGACAUGU-5′	SEQ ID NO. 751
3′-GGUCCGUGACCCUUCAGUCACCGU-5′	SEQ ID NO. 752
3′-UUAAUCCUCACUAUGGAAGUGAUU-5′	SEQ ID NO. 753
3′-ACUCUUUUUCCGGUGACAGGAAAU-5′	SEQ ID NO. 754
3′-UGUUUAACCUCUUUAUCACUUUU-5′	SEQ ID NO. 755
3′-CUUCGUCUCUCUUUCAUCUCUUC-5′	SEQ ID NO. 756
3′-AGUUUUCCUCUCUUGUCUACGACC-5′	SEQ ID NO. 757
3′-GUUUUCUUCCGUAAUUUUCUCCU-5′	SEQ ID NO. 758
3′-CUCUACCUGAAACUAAAGACACU-5′	SEQ ID NO. 759
3′-CCUUUAGGUCCCUCCAAAACCUU-5′	SEQ ID NO. 760
3′-UUUCCUUCUUUAACUUUGGGUCU-5′	SEQ ID NO. 761
3′-CACCGUCCGGGUAAUGUGGUGGU-5′	SEQ ID NO. 762
3′-UCAAAUUUAAAUAUAGGUUUUAUUUAAA-5′	SEQ ID NO. 763
3′-UUCUUUUUCUAUUUAUCUUGUGUUUCUUAACUGUUU UAAA-5′	SEQ ID NO. 764
3′-AGAUUCGCUUCAUUGUUGUUCUCA-5′	SEQ ID NO. 765
3′-UUGUCUUUCUUCGUAAUAAUGUAGUCCGAAGA-5′	SEQ ID NO. 766
3′-ACUAAAUAUAAAUGACCAUAUUUUAUCA-5′	SEQ ID NO. 767
3′-UUGUUUGUUUGGUCUCUGUGAUUCCUUUACGU-5′	SEQ ID NO. 768
3′-UAUGUUAGUUUAACUUACCGUA-5′	SEQ ID NO. 769
3′-UCUACUGUUAACACUUUAAUUU-5′	SEQ ID NO. 770
3′-CAAUAUAUACCCUUUACUACCUUAAUUGU-5′	SEQ ID NO. 771
3′-UUUUUUGAUUCACUAAGUUGU-5′	SEQ ID NO. 772

TABLE 2-continued

Antisense sequence listing of the target of the RNA virus	
Antisense fragment coding sequence	ID number
3′-UUUAUGUUUUUUAUAUGACUUAUGUU-5′	SEQ ID NO. 773
3′-AAAUGUAAGGACCAGUUGAUACUUUACUUUGAUAAC G-5′	SEQ ID NO. 774
3′-GAUGUUUUUUUACGAUUUUCUU-5′	SEQ ID NO. 775
3′-UACGACUUGUUGAGUUUCUUUU-5′	SEQ ID NO. 776
3′-UCCUUUCACUUUUCUACCGUUU-5′	SEQ ID NO. 777
3′-UUACUCCUUUCACUUUUCUACCGUUUUCU-5′	SEQ ID NO. 778
3′-GUUCUUUUUUCUAUCAUAGUA-5′	SEQ ID NO. 779
3′-GGUAUCUUUGUAAACUAUUGUUACUUCUU-5′	SEQ ID NO. 780
3′-UUUCAUAUAUAAUACAAUGUUGU-5′	SEQ ID NO. 781
3′-UACUAUUGUUGUUAUUAGAGAAA-5′	SEQ ID NO. 782
3′-UGAUUAUGUGUACUAUUGUU-5′	SEQ ID NO. 783
3′-ACUAUUGUUGUUAUUAGAGAAACGAU-5′	SEQ ID NO. 784
3′-CUUUUCCUUUUCUUCUAAAGAAC-5′	SEQ ID NO. 785
3′-UUACAUGUCGUAGGUUAUUUUU-5′	SEQ ID NO.786
3′-AUUAAUAAAACUUACCGGUGGGGUAC-5′	SEQ ID NO.787
3′-UUAAUAAAACUUACCGGUGGG-5′	SEQ ID NO.788
3′-AGAUAUUUAUUAUAUUGAUUU-5′	SEQ ID NO.789
3′-AUUUAUAUCUAUUUUAUAUGUAAU-5′	SEQ ID NO.790
3′-UUUACAAACAAAUUAAUGUACCUAAUCAU-5′	SEQ ID NO.791
3′-UACCAAUUAUGUAACCAAAUUAAAUAU-5′	SEQ ID NO.792
3 ‘-UUGAUAUAAUUUUUGAAUACAUA-5’	SEQ ID NO.793
3′-AUAUCUUGUACUUUUUAAUUUUAAAAG-5′	SEQ ID NO.794
3′-AUCUGUUAUAUUGAUAUAAUUUU-5′	SEQ ID NO.795
3′-UUACAAUGGUAACAAUAGAUUAU-5′	SEQ ID NO.796
3′-UCCAUUUAAUUACUCUCUCUUACCUCAA-5′	SEQ ID NO.797
3′-AUAAAAUUUUCCGUCUAUUAAUCU-5′	SEQ ID NO.798
3′-CCUUGAACCACGUAAAAAAAGAU-5′	SEQ ID NO.799
3′-UAAAAAGAACUAACGAAAAGUU-5′	SEQ ID NO.800
3′-AUAAGACUUUUACCAUAUAAAUU-5′	SEQ ID NO.801
3′-UCGGAUAAAAGUAACUACGGACU-5′	SEQ ID NO.802
3′-AGUUGUUUAUAAAUGUCCGUUUU-5′	SEQ ID NO.803
3′-AAUCUUUUUACCUUUUCAUAUCU-5′	SEQ ID NO.804
3′-UUCUCGAGUUGUUUAUAAAUGUC-5′	SEQ ID NO.805
3′-AGAUUUAUAAGUCUUACGUGAUCUCUUU-5′	SEQ ID NO.806
3′-ACUACCCCCAACUGCCUCAACCCCUCA-5′	SEQ ID NO.807
3′-CCCCUAACCUUUCCGAGAGACAC-5′	SEQ ID NO.808
3′-UUUACCUCGUCUUUCUUGUGAGUCC-5′	SEQ ID NO.809
3′-ACCGAGCUUCUCGUACCUCUCCUU-5′	SEQ ID NO.810
3′-UCCUUCCCCUAACUCUCUGAGUG-5′	SEQ ID NO.811
3′-UUUUAUCUGACCUCUACCGGUACACCUCUUCG-5′	SEQ ID NO.812
3′-GUCGCGUCCCCUUCUCACCCGUCCGUC-5′	SEQ ID NO.813
3′-UUAUUCUUUUCGUUGUAACACUAAAAAUUAAU-5′	SEQ ID NO.814
3′-AUUUUUUUCAGUUUAAAUACUAAU-5′	SEQ ID NO.815
3′-GAAACCGUAAAGUCACUAAGUCGUUUU-5′	SEQ ID NO.816
3′-UUUACACGAGGGGAAAGGACCU-5′	SEQ ID NO.817
3′-AAAAUUUCCUCACCACUUCUUCUUUCU-5′	SEQ ID NO.818
3′-UUUAUUAUAUUUACGUAAGUUGA-5′	SEQ ID NO.819
3′-CCGUCCACACCAACGAGUUCGACAUU-5′	SEQ ID NO.820
3′-AUAUUGUAAAAGGACGAAGGUU-5′	SEQ ID NO.821
3′-AGUAACCUUCUACCUCGAGAAA-5′	SEQ ID NO.822
3′-GUCGAAUGAGAAGGAGUCUCAAGAAA-5′	SEQ ID NO.823
3′-AAAUACUUAAGAUGUCUUUAUUACUAUUAC-5′	SEQ ID NO.824
3′-UUUCUAAUACCUUUGAAAAGAC-5′	SEQ ID NO.825
3′-AACGACAAAAAGGUUUGUGAUCU-5′	SEQ ID NO.826
3′-CAGUUAGGUUUAUAACCUUCUUCGUCUUCAAUUA-5′	SEQ ID NO.827
3′-UACACCUCUGUAAGGUCGUGUCUCCUUUG-5′	SEQ ID NO.828
3′-AGUCCGAGUUCACUAGAGAGUAAAGU-5′	SEQ ID NO.829
3′-AAUAUAACUUCAAAUACUUCAAC-5′	SEQ ID NO.830
3′-UCUAUAUCCUUACACAGACUUU-5′	SEQ ID NO.831
3′-UUUUCAGUUCUUUUAAUUUAAAUAU-5′	SEQ ID NO.832
3′-AUACGGACUAUUAAAAAGUAACC-5′	SEQ ID NO.833
3′-UAUUUCCUUUUCAGUUCUUUUAA-5′	SEQ ID NO.834
3′-UCUCUCUCUCUUUUCUUUUAAC-5′	SEQ ID NO.835
3′-AUACGGACUAUUAAAAAGUAAC-5′	SEQ ID NO.836
3′-GACACAAAAGAGGAUCUUACAGU-5′	SEQ ID NO.837
3′-UUUCUGUCCUAAAGUAAUAAACAU-5′	SEQ ID NO.838
3′-ACCUACACUCUUUAUGAACCCU-5′	SEQ ID NO.839
3′-UUUUCUGUCCUAAAGUAAUAAA-5′	SEQ ID NO.840
3′-UUUUCUGUCCUAAAGUAAUAAACAUA-5′	SEQ ID NO.841
3′-CUGUCCUAAAGUAAUAAACAUA-5′	SEQ ID NO.842
3′-UCAAGAGAAAACUGUAAAACAAG-5′	SEQ ID NO.843
3′-ACUGUAAAACAAGAAAGAAAC-5′	SEQ ID NO.844
3′-CUUUUACAACAGGUUGUUAGGUUAGUU-5′	SEQ ID NO.845
3′-CCUUCUUUUCUGUAAUUUGAUUAA-5′	SEQ ID NO.846
3′-AUUAGAAGAUAUUCAGAUCAUUU-5′	SEQ ID NO.847
3′-GUCCUUAGGAACAUCACUACCCUAACA-5′	SEQ ID NO.848
3′-AUAUAAGUUACCGUUUUCUUUUGUUUA-5′	SEQ ID NO.849
3′-UUACGGAAUUAGAGUCUAUUAAACAAUU-5′	SEQ ID NO.850
3′-AUUAAACAAUUACUUCUUAUUUUAAUU-5′	SEQ ID NO.851
3′-UUGUUCAAAGAGGAAUAGUAUUU-5′	SEQ ID NO.852
3′-GUAUCAUAGAGAAUAUUAGGAAAAGUAAA-5′	SEQ ID NO.853
3′-UAUCAUAGAGAAUAUUAGGAAAAGUAAA-5′	SEQ ID NO.854
3′-AUGUUUGUACCCGUUAAGUUUUAG-5′	SEQ ID NO.855
3′-CGAGAAGAAAGGAAUUGUUUACA-5′	SEQ ID NO.856
3′-ACAAUUUGUGAAAGAAAGGAAAA-5′	SEQ ID NO.857
3′-UAUCAUAGAGAAUAUUAGGAAAA-5′	SEQ ID NO.858
3′-UGUUGACUUUGUUACGUUCCUUA-5′	SEQ ID NO.859
3′-CAAGUUCCCGGUUAAUAUAGUGU-5′	SEQ ID NO.860
3′-AUAUUUUAAAAGAGUCCAGAUA-5′	SEQ ID NO.861
3′-UCUUUAAGUCCUUUUACCUUUUU-5′	SEQ ID NO.862
3′-GUGUUUCGAGUUCGUGCAUAACA-5′	SEQ ID NO.863
3′-GAACAAAAGAAAGGGAAAGAAAGAC-5′	SEQ ID NO.864
3′-AAAGAAAGGGAAAGAAAGACGAAAGA-5′	SEQ ID NO.865
3′-AAAAGAAAGGGAAAGAAAGACGAAAGAGA-5′	SEQ ID NO.866
3′-AAAGAAAGGGAAAGAAAGACGAA-5′	SEQ ID NO.867
3′-AAAGAAAGGGAAAGAAAGACGAAAGA-5′	SEQ ID NO868
3′-UAUACCUACAUCUAAAGUAAAC-5′	SEQ ID NO.869
3′-AAAAGAAAGGGAAAGAAAGACGAAAGA-5′	SEQ ID NO.870
3′-UGUAGAAAUGUUACACCUAUAAAGAAG-5′	SEQ ID NO.871
3′-AAGUAUGUAAGAUUUGAAUUAAGGUCUA-5′	SEQ ID NO.872
3′-CUGAUGUUCUCUUCCUACCGUCU-5′	SEQ ID NO.873
3′-UUACCGUCAAUACUUAUAUAAU-5′	SEQ ID NO.874
3′-UUCCAACAUAAAAUAAUAAAUU-5′	SEQ ID NO.875
3′-GGAAAAAGGAAAAGUAGUGAAAAAAA-5′	SEQ ID NO.876
3′-GUCCUUUUUUUACCUAUGAUUU-5′	SEQ ID NO.877
3′-UAAUAAAAUAUUAGUAAUAGAUUAAU-5′	SEQ ID NO.878
3′-AUAUAUAUACGUUCAUCGUAUAUAUAU-5′	SEQ ID NO.879
3′-ACAAUCUAAAGAACAGUAAAAAAGG-5′	SEQ ID NO.880
3′-GGUGUCGUUGUACCAAAGUCAUA-5′	SEQ ID NO.881
3′-GAACAAUUCAUGAACUAUAGACA-5′	SEQ ID NO.882
3′-UAAGAGAAUAAUACUUAUUUCGU-5′	SEQ ID NO883
3′-UCUCUCUUUCUUUCUCUUAACCCCUCA-5′	SEQ ID NO.884
3′-UAUACCUACAUCUAAAGUAAAC-5′	SEQ ID NO.885
3′-UUGUAGAAUAAAGGAAGAAAAG-5′	SEQ ID NO.886
3′-AAAAAUCGGGAACGUUUCUUGA-5′	SEQ ID NO.887
3′-GAAGUAAUUCACAAAAAUAGCCUUCAGU-5′	SEQ ID NO.888
3′-ACGGGACUGAAGUGUCCGGUAAA-5′	SEQ ID NO.889
3′-UAAUAGAAUUCUUUCUAAUUUCUU-	SEQ ID NO.890

TABLE 2-continued

Antisense sequence listing of the target of the RNA virus

Antisense fragment coding sequence	ID number
CUUAAAC-5′	
3′-AGUUUCGUUUUAUCCAAGUCUCG-5′	SEQ ID NO.891
3′-UUGAAAAAUAACUAGGUCACGAGU-5′	SEQ ID NO.892
3′-UCUAUAGAAAGUUUUUUAAAGUU-5′	SEQ ID NO.893
3′-UACGUAUGUUGUUACCCUUACAGUAAA-5′	SEQ ID NO.894
3′-UAACAAAUAUAAAUAAAAGUAAA-5′	SEQ ID NO.895
3′-GUUGUAUUUUUUAGUUGGUAUAA-5′	SEQ ID NO.896
3′-AGGAGAAAAGAAAAGGAAAGAGGAAGAAA-5′	SEQ ID NO.897
3′-GUCUUUUCGUCAUACUCUUCCU-5′	SEQ ID NO.898
3′-AACGGACCCCUUUCCUCCGUCA-5′	SEQ ID NO.899
3′-GUCUUUUCGUCAUACUCUUCCU-5′	SEQ ID NO.900
3′-AGAAAAGAAAAGGAAAGAGGAAGAAA-5′	SEQ ID NO.901
3′-CAGGAGAAAAGAAAAGGAAAGAGGAAGAAA-5′	SEQ ID NO.902
3′-GAAAAGAAAAGGAAAGAGGAAG-5′	SEQ ID NO.903
3′-GAGAAAAGAAAAGGAAAGAGGAAGAA-5′	SEQ ID NO.904
3′-AAUUAUUCUUAUGUCUAAAUAA-5′	SEQ ID NO.905
3′-AGAGACUCAAUCUUUUACUCUUUCA-5′	SEQ ID NO.906
3′-GAAACGUAAUUUUUUACACAAACU-5′	SEQ ID NO.907
3′-AAAAUAUACAGAUCUUUUGAAUCUGUGAUAU-5′	SEQ ID NO.908
3′-GAUGUCCUACAUCUAAAACUUUUAU-5′	SEQ ID NO.909
3′-AGAAACAUAAGACCGAAAGGAAGAAACCAAC-5′	SEQ ID NO.910
3′-UCUUCUGUGUUUUUUUACACAAUUGUGUUUUG-5′	SEQ ID NO.911
3′-AGUCACAAAAGACUGAGGUUUCAA-5′	SEQ ID NO.912
3′-AUGGUUCUUUUACUUCUUCCGAGAAGACU-5′	SEQ ID NO.913
3′-AAAUGAACGAAUACAUUGGAAUAAAA-5′	SEQ ID NO.914
3′-AAAGAGAUAAAAGAGAACAAAAUUUG-5′	SEQ ID NO.915
3′-UUCUACUGAUAGAUUUUACAGUCC-5′	SEQ ID NO.916
3′-UAAGUGACGGAAGAAGGGAGAGU-5′	SEQ ID NO.917
3′-GACAGACGAUUGGUCAUACUUGU-5′	SEQ ID NO.918
3′-UCUUUCAAGAUAGUUCttttttt-5′	SEQ ID NO.919
3′-AAAGUUUAAGGAAGAGUCUUAAG-5′	SEQ ID NO.920
3′-UAAAACAUGUCUUCCAAAAGUAUU-5′	SEQ ID NO.921
3′-UAACUAAUCUUUAAGUUGAACCUUUUUAGUUAC-5′	SEQ ID NO.922
3′-CCUACAGAAACAGAAAGAAAAAGAAAC-5′	SEQ ID NO.923
3′-UGUGGUUUCCCUUUGAGUGACUGUCUUUUG-5′	SEQ ID NO.924
3′-CUGUGUCUACUUCUUUGAAGGAAA-5′	SEQ ID NO.925
3′-AUGUUGGGUUCUCUCGAAUUUG-5′	SEQ ID NO.926
3′-UUUCUUACUUCAUUUCCAGUCGU-5′	SEQ ID NO.927
3′-CACGAUAACUAGUCUGAUUAAU-5′	SEQ ID NO.928
3′-CGACCUGACACCACUGUCGGAG-5′	SEQ ID NO.929
3′-GUUGGAGACGUGUUUUACUCGA-5′	SEQ ID NO.930
3′-UGUUACCUCGUACGUUCCUUCGU-5′	SEQ ID NO.931
3′-AUCGUCCAUCAUAGGUUCUGUCUCUG-5′	SEQ ID NO.932
3′-UUUUACGACUCCUAUACCCGUU-5′	SEQ ID NO.933
3′-GUUAUUGGUUUCUCUUUUUUCUU-5′	SEQ ID NO.934
3′-UUAGUACCUUCAACAAAAGGGGU-5′	SEQ ID NO.935
3′-UUCGUUGGUCCUCUAACCAAGU-5′	SEQ ID NO.936
3′-UACGUUGACUCUAGUCUCGUAG-5′	SEQ ID NO.937
3′-GGUCUCCUGUUCUCGAGAACAA-5′	SEQ ID NO.938
3′-CUCCUGCUCUACCCACCUAGUUCU-5′	SEQ ID NO.939
3′-CUCCUGCUCUACCCACCUAGUUCUCCAG-5′	SEQ ID NO.940
3′-AACCGAGUAAGAGACAAAAAAAACAAAAAAAA-5′	SEQ ID NO.941
3′-CUCCUGCUCUACCCACCUAGUUCUCCAG-5′	SEQ ID NO.942
3′-GAGUAAGAGACAAAAAAAACAAAAAAAA-5′	SEQ ID NO.943
3′-GAAAUAAGAUUUUAUAAAAAUUUA-5′	SEQ ID NO.944
3′-UACUCGGGUUCUGAAGAAAACUA-5′	SEQ ID NO.945
3′-UUCUUUGACACUAAAAAUUAUGAAU-5′	SEQ ID NO.946
3′-UUCUUACUAUUUCGUUUCUUUU-5′	SEQ ID NO.947
3′-AUGAAAAUUUCUACGUACGAAAGUAA-5′	SEQ ID NO.948
3′-AAAUUUUUUACUAUUCUUAUUU-5′	SEQ ID NO.949
3′-UCUUACUAUUUCGUUUCUUUUACAUC-5′	SEQ ID NO.950
3′-AUGACUAGAGGUUGAGUCUUCU-5′	SEQ ID NO.951
3′-UUUUAAACUUUCUUACUAUUUCGUUU-5′	SEQ ID NO.952
3′-UUUUUACUUACUUUUAUACGUAAGAGAAGUUUU-5′	SEQ ID NO.953
3′-UUUCGUUCUUUUUACUUACUUUU-5′	SEQ ID NO.954
3′-GUUCUUUUUACUUACUUUUAUA-5′	SEQ ID NO.955
3′-UCCUCUUUAGUUUUGUUUUGGUAU-5′	SEQ ID NO.956
3′-CGUAAGUUAUUUAUGUACGAC-5′	SEQ ID NO.957
3′-UACAUUCUUGACAUUUAUAUU-5′	SEQ ID NO.958
3′-UUUUGUUUUGGUAUUUUCAUC-5′	SEQ ID NO.959
3′-UUUCCUCUUUAGUUUUGUUUUGGUAUUUU-5′	SEQ ID NO.960
3′-AUCCCUCGAGGGGUGAGGGCAAAACACUG-5′	SEQ ID NO.961
3′-AUAUAGUUUUCUUUUACUUUAGUU-5′	SEQ ID NO.962
3′-CUAAUUUAAAUAUAGUUUUCUUUUACUU-5′	SEQ ID NO.963
3′-AUAUAGUUUUCUUUUACUUUAGUUAU-5′	SEQ ID NO964
3′-UUUCUUUUACUUUAGUUAUCAACUCCU-5′	SEQ ID NO.965
3′-AUAUAGUUUUCUUUUACUUUAGUUAUC-5′	SEQ ID NO.966
3′-UACUGGUUUACAUAUCUAACUCU-5′	SEQ ID NO.967
3′-AUAUAGUUUUCUUUUACUUUAGUUAUCAACUCCU-5′	SEQ ID NO.968
3′-AUAUAGUUUUCUUUUACUUUAGUUAU-5′	SEQ ID NO969
3′-AACUUUAUUCUUCUAAUCUAUAAAAAUUAA-5′	SEQ ID NO.970
3′-ACUAUAGUAAAAGUUAAUGUAU-5′	SEQ ID NO.971
3′-UUCUUUUUCUUCUAUCGUUCUU-5′	SEQ ID NO.972
3′-UCGAUUUCAAACCAUCCUUUUGUU-5′	SEQ ID NO.973
3′-UUUAGUUCAUUUUAUUGUUAUUUACUGUAUG-5′	SEQ ID NO.974
3′-GUAAUUUAAAUAUGUUUGUUUGUGUUU-5′	SEQ ID NO.975
3′-UCGAUUUCAAACCAUCCUUUUGUU-5′	SEQ ID NO.976
3′-CUUUAUAUGGUAUAUUUAUACUACA-5′	SEQ ID NO.977
3′-UUUAUUCUAGUCUUAAAAUAAAU-5′	SEQ ID NO.978
3′-UCUUAAUAUAAUUAUGUCAUAU-5′	SEQ ID NO.979
3′-UCGUAAUUUUGUAAUCUUUAUAAUUUAUUC-5′	SEQ ID NO.980
3′-UCUUAAUAUAAUUAUGUCAUAUAUCA-5′	SEQ ID NO.981
3′-CUUCUUAAUAAGUGUAAUUAUU-5′	SEQ ID NO.982
3′-CUUCUUGUUUGAUAAUUAUUAA-5′	SEQ ID NO.983
3′-AUUCUAGUCUUAAAAUAAAUAAUGAU-5′	SEQ ID NO.984
3′-AUUUGGUUUGUAAAAAGGAAUA-5′	SEQ ID NO.985
3′-UAAAAUUUUGUGAAUUUUUAAA-5′	SEQ ID NO.986
3′-GUUAUAAAGACGACAAGUUAAGUUACC-5′	SEQ ID NO.987
3′-AAAAAACCCAAAACAAACACAACUAUGAAACUC-5′	SEQ ID NO.988
3′-CGUUUAAAUAGAAUUUAAGUUCAUGUAU-5′	SEQ ID NO.989
3′-AUUGUCUGAACCUUUUUAUGUUAA-5′	SEQ ID NO.990
3′-UAAUGGAAGUUUUUAGAUCUUGAAAUAAUUAAGAGUC-5′	SEQ ID NO.991
3′-UUUUAAUUUUUGUUUUUACUUUCC-5′	SEQ ID NO.992
3′-GAAUAAAAUACAGAAGAAACAACAAAAA-5′	SEQ ID NO.993
3′-UAAUAAUUGUUGAAUAAAAAUAAAUUAGAAAAU-5′	SEQ ID NO.994

TABLE 2-continued

Antisense sequence listing of the target of the RNA virus	
Antisense fragment coding sequence	ID number
3′-UAUUUCUUCUUAUAAUUGUAACUGUAAU-5′	SEQ ID NO.995
3′-AAUACUUACAAAAUAGUACUAAUUUCUA-5′	SEQ ID NO.996
3′-GGGUCGUGUCUCUACAGUAACU-5′	SEQ ID NO.997
3′-UCACUCUUUACUACUACAACUAGUCU-5′	SEQ ID NO.998
3′-AAGAUUCCUUUCGUUGGUCUUC-5′	SEQ ID NO.999
3′-ACUCGUUCUUCUUUAGGAUGUA-5′	SEQ ID NO.1000
3′-CCUUACUCUUCUUUCGAUUUAA-5′	SEQ ID NO.1001
3′-AAUCUUUACAGAAUUCGUAACG-5′	SEQ ID NO.1002
3′-GUCCUGUAACUUUUACUUCUCUUC-5′	SEQ ID NO.1003
3′-UUCUCUUUCUGGACUGGUUUCU-5′	SEQ ID NO.1004
3′-UGAUUCAGUAUAUUUUUAUGUUCUUUUU-5′	SEQ ID NO.1005
3′-UUGUUAAACUCAACUAUCUGUUACUUA-5′	SEQ ID NO.1006
3′-UAGUACAAAGUAUGAAGAUCGGUAAC-5′	SEQ ID NO.1007
3′-CUUUGUAUGAUUCUUGUGUCCUU-5′	SEQ ID NO.1008
3′-AAAGUGGUAAUGGAAGAGAAGG-5′	SEQ ID NO.1009
3′-UCCUUCGUUUUAAUUUGUCUCUUCUUU-5′	SEQ ID NO.1010
3′-ACCUUUUACUUUCUUGAAACCU-5′	SEQ ID NO.1011
3′-UUUUGUUGUGAACCCAUUUAGUCUGU-5′	SEQ ID NO.1012
3′-CGACGACCUGUCAGUCACCAAA-5′	SEQ ID NO.1013
3′-CCUAGUUCUUUCUUCUCAAGAGACUCU-5′	SEQ ID NO.1014
3′-CCCCUCUGUGUGUUUAAGUCUG-5′	SEQ ID NO.1015
3′-UGGUUUACUUUUGGGUCGAGUGUUCUCAGU-5′	SEQ ID NO.1016
3′-UUUACUCUUACACCUUUGGUAC-5′	SEQ ID NO.1017
3′-UCUUUAUUCCUCUCAAACCGCG-5′	SEQ ID NO.1018
3′-UCUUCUCAUCUGCCUUUCACCU-5′	SEQ ID NO.1019
3′-CUGUAAGAAACCGACCUUUCUCGGAUU-5′	SEQ ID NO.1020
3′-CUUCUCUCGUCCCGUUCUUAGUUUUGAUCC-GA-5′	SEQ ID NO.1021
3′-UCCCGUUCGAAAGGGUUUACAG-5′	SEQ ID NO.1022
3′-CCUGUACUAAGGUCUCUCCUUACUUGUUC-CUGUU-5′	SEQ ID NO.1023
3′-CCUUUAACACUUUUAAGUUACC-5′	SEQ ID NO.1024
3′-CUCAGAUGUAAGAGUCAAAACAG-5′	SEQ ID NO.1025
3′-CUCUGUCUGUCAUUUCCUUUUA-5′	SEQ ID NO.1026
3′-ACUUCUUUUUGAUUUCUUUUUU-5′	SEQ ID NO.1027
3′-GGUCUGUCGUCUGACCUUCCGU-5′	SEQ ID NO.1028
3′-UUGUCCUUUAGUAUAACUUAAACA-5′	SEQ ID NO.1029
3′-UCAUACGUACCUUUCUAAAAGAAUUAC-5′	SEQ ID NO.1030
3′-GUCUCAAACUUAAAAUACUAGUC-5′	SEQ ID NO.1031
3′-ACUCCCAUUGUAAAUUAAAACCC-5′	SEQ ID NO.1032
3′-AAAAAAGAAAAACUCUUUCCCGAAGUA-5′	SEQ ID NO.1033
3′-UCUUUUGUUGUCCACAACUACUC-5′	SEQ ID NO.1034
3′-AAAAAAGAAAAACUCUUUCCCGA-5′	SEQ ID NO.1035
3′-UUUACUUUCUAAAGGUCUUUAAC-5′	SEQ ID NO.1036
3′-UGUUGUCUAUGUUGUUUACGACCACUCUUA-5′	SEQ ID NO.1037
3′-UCACUAAGUACGACUUUAUGUCA-5′	SEQ ID NO.1038
3′-UACUCUCUAGAACCCCCACCCUG-5′	SEQ ID NO.1039
3′-GGUUACAUAAAUAUGUAAAUGUUCAU-5′	SEQ ID NO.1040
3′-UUCAAGUUACUCUUUCUCUUAUCUAUACC-5′	SEQ ID NO.1041
3′-AUGAAUGUACGGUUUAGAGUU-5′	SEQ ID NO.1042
3′-UCAAGUUACUCUUUCUCUUAU-5′	SEQ ID NO.1043
3′-AUGUAUGAUAAUUACACUAAAU-5′	SEQ ID NO.1044
3′-AAAACAGGAAGGUUAACACAAC-5′	SEQ ID NO.1045
3′-CUUCGUCUCUCUUUCAUCUCUUC-5′	SEQ ID NO. 1046
3′-AGUUUUCCUCUCUUGUCUACGACC-5′	SEQ ID NO. 1047
3′-AGGGACCUACCGUUCGUCUUCGU-5′	SEQ ID NO. 1048
3′-GUCCUGUAACUUUUACUUCUCUUC-5′	SEQ ID NO. 1049
3′-UUGUUCUCGUCCGGUCACACCACC-5′	SEQ ID NO. 1050
3′-AACUCCUUUUCCCUUGGGACAUGU-5′	SEQ ID NO. 1051
3′-GGUCCGUGACCCUUCAGUCACCGU-5′	SEQ ID NO. 1052
3′-UUAAUCCUCACUAUGGAAGUGAUU-5′	SEQ ID NO. 1053
3′-ACUCUUUUUCCGGUGACAGGAAAU-5′	SEQ ID NO. 1054
3′-UGUUUAACCUCUUUAUCACUUUU-5′	SEQ ID NO. 1055
3′-AUAAUCUUUAUUGUGGAUACU-5′	SEQ ID NO. 1056
3′-UUUCCUUCUUUAACUUUGGGUCU-5′	SEQ ID NO. 1057
3′-CUACAGUAGUUCUUACGUCUACG-5′	SEQ ID NO. 1058
3′-UGUUUUCUACGUCUUUCUCCGUUC-5′	SEQ ID NO. 1059
3′-UUACAAUAACUCAUAUAUCUCUCU-5′	SEQ ID NO. 1060
3′-GUAAACUACUAGACCGUAAGGUUGA-5′	SEQ ID NO. 1061
3′-CUUCCCUCCGACUAGGUCUUGUCA-5′	SEQ ID NO. 1062
3′-CCGUGUUGACCUCACCUCAGACGA-5′	SEQ ID NO. 1063
3′-GUUUUCUUUUCUUUCUUCUCGAG-5′	SEQ ID NO. 1064
3′-AGGUUUAACGAAGUUUACUUUU-5′	SEQ ID NO. 1065
3′-UUAACAUGUUUUUGGGACUAUG-5′	SEQ ID NO. 1066
3′-UACUCCUUACCUCCCUUAUCGA-5′	SEQ ID NO. 1067
3′-UAACGAGGAAACGACCUACCUA-5′	SEQ ID NO. 1068
3′-AAGGUUAGACUUACUACGUUGU-5′	SEQ ID NO. 1069
3′-AUUUUCGACGUAGUUAUCCACA-5′	SEQ ID NO. 1070
3′-CCCUCUAACUAGGUUUUGUCGU-5′	SEQ ID NO. 1071
3′-UCCCCCUUCGGGUCUAGGACCU-5′	SEQ ID NO. 1072
3′-ACGGUGUCUCCUCUGUGUGUUU-5′	SEQ ID NO. 1073
3′-CUCUUUCCUUUCACCUGUUGU-5′	SEQ ID NO. 1074
3′-GUAUUGUUGUUGUUAUUAUUGACUU-5′	SEQ ID NO. 1075
3′-UCCUUCCCUUUUAUGUUUUUUA-5′	SEQ ID NO. 1076
3′-CUCCUUUACUCUUCUUCCGAU-5′	SEQ ID NO. 1077
3′-GACCUCGACGACCUCGUCGUC-5′	SEQ ID NO. 1078
3′-AGAGUUUGAACGUCAACCAG-5′	SEQ ID NO. 1079
3′-AACUGAUACCCUCACUACAAA-5′	SEQ ID NO. 1080
3′-UCAAACUUAAGUAACGACUUC-5′	SEQ ID NO. 1081
3′-CUUUUUGUUCUAAAGAGGGUCAC-5′	SEQ ID NO. 1082
3′-UGUCCCACUACCACAGGGGG-5′	SEQ ID NO. 1083
3′-UUUACCUGGUGUUUGUGUCUUUG-5′	SEQ ID NO. 1084
3′-UACAGAAGAAGUUAGUGAAGUUG-5′	SEQ ID NO. 1085
3′-AUGACGAUUCCUUCGUGUUCUAC-5′	SEQ ID NO. 1086
3′-UUUUUAACUUUGCUUGUUUAAG-5′	SEQ ID NO. 1087
3′-UUAUUUAUGUUGUAAUGGGAAA-5′	SEQ ID NO. 1088
3′-UUCGUUCUAAUUUUUCUCUCCU-5′	SEQ ID NO. 1089
3′-AAUCUCGUAGACAACCUUCUUA-5′	SEQ ID NO. 1090
3′-UUGUCUCCGACUUGUUCUCCU-5′	SEQ ID NO. 1091
3′-ACGUCUUCCUUGUCCUUGCCG-5′	SEQ ID NO. 1092
3′-UAACAUACCUGUGUUAAUCUUUG-5′	SEQ ID NO. 1093
3′-UACUCUUUGCACGGACUCUUUGU-5′	SEQ ID NO. 1094
3′-ACAAAAGAAGACAGACUUCU-5′	SEQ ID NO. 1095
3′-GUAUAUUAAUCGUAGUGUUA-5′	SEQ ID NO. 1096
3′-UGUUUAGUCGUCAAACUUGACUAU-5′	SEQ ID NO. 1097
3′-CUUUCUCCAUUUAAUUUUUC-5′	SEQ ID NO. 1098
3′-UUCAUCGUCCGAGUGAGACG-5′	SEQ ID NO. 1099
3′-UCUUCCUCUCUUCCUUUUACC-5′	SEQ ID NO. 1100
3′-UGUUUAUGGACGUCUUUACG-5′	SEQ ID NO. 1101
3′-UUACUUAGUUGUUCUUUCUUUU-5′	SEQ ID NO. 1102
3′-UUACUUAGUUGUUCUUUCUU-5′	SEQ ID NO. 1103
3′-CUCUUACUUCUCUUUUGAGG-5′	SEQ ID NO. 1104
3′-UAAGUCACUUUAACCUUUUA-5′	SEQ ID NO. 1105
3′-UCUUUAUGUGGUUCUGGUGUAU-5′	SEQ ID NO. 1106
3′-GAACUUGAAUCUUCGUCUAUA-5′	SEQ ID NO. 1107
3′-UGUUACGAUAGUUAACAUUAG-5′	SEQ ID NO. 1108
3′-UGUUACGAUAGUUAACAUUA-5′	SEQ ID NO. 1109
3′-CUUGAAGUCCUGUAUCUUUUA-5′	SEQ ID NO. 1110
3′-CGGAAGGAAAGGUCUUACAC-5′	SEQ ID NO. 1111
3′-CUAUACUGAAACUUUCCCUC-5′	SEQ ID NO. 1112
3′-UCCCCAACCUUACCGACGUC-5′	SEQ ID NO. 1113
3′-GUCUCAUCUUACGUUAAGAGGAGU-5′	SEQ ID NO. 1114
3′-AAGGACGAAAUGGUAUUACUGACU-5′	SEQ ID NO. 1115
3′-AAAGUAUUACAGUCGUUUAUACGU-5′	SEQ ID NO. 1116
3′-CCAGAUGUUUUGUAUGAAACUCUU-5′	SEQ ID NO. 1117
3′-GUUUUAAUCUCUCUGUCUUUUAUCU-5′	SEQ ID NO. 1118
3′-CUUCGUUUUGACAAACACGA-5′	SEQ ID NO. 1119

TABLE 2-continued

Antisense sequence listing of the target of the RNA virus	
Antisense fragment coding sequence	ID number
3′-AACAAAAAUACACCUCGAUUAGU-5′	SEQ ID NO. 1120
3′-GUGUUUCCUGUUAUCCUUUCUUU-5′	SEQ ID NO. 1121
3′-AUUUCUUUAACUUAGUCAUUUAUU-5′	SEQ ID NO. 1122
3′-UCACUCUGUGUCCCUUGUCUCUUU-5′	SEQ ID NO. 1123
3′-GUAUACUUUCUUACACGUUGUAG-5′	SEQ ID NO. 1124
3′-AAGUUACUUAGUUGUUUUUUCUUU-5′	SEQ ID NO. 1125
3′-GUCGUCUAUUUUCUUAUUACCUUUAC-5′	SEQ ID NO. 1126
3′-UCAACUAUUAUUGUUGACCAGACCA-5′	SEQ ID NO. 1127
3′-UCUUCUUCUUUUUCUCCUGAUAAA-5′	SEQ ID NO. 1128
3′-GAAGGGUCAAAACCUCACAGACCCUA-5′	SEQ ID NO. 1129
3′-UUUAAAUUUAUUCUUUUACCUUCUA-5′	SEQ ID NO. 1130
3′-UUAGAUUACCCUUAAAUUAUCGAG-5′	SEQ ID NO. 1131
3′-UACGUCUUGAAAGAAAAACUGAG-5′	SEQ ID NO. 1132
3′-UGUAAGAAAAGUACACCCCGUAUU-5′	SEQ ID NO. 1133
3′-GAUCAGUCCGAUCCGUCUACCA-5′	SEQ ID NO. 1134
3′-GUUUCGUCUUACGUCAAGAGAA-5′	SEQ ID NO. 1135
3′-ACGUGGUUAAUUUUAUGUCUAUA-5′	SEQ ID NO. 1136
3′-UCUCAUUCUCUGUUGUACUGGU-5′	SEQ ID NO. 1137
3′-CCCUUAACCCUGUUACCACUAC-5′	SEQ ID NO. 1138
3′-UUACGGAACAAAGAUGAUUAUG-5′	SEQ ID NO. 1139
3′-AUUCUCCUAGUCCUUACUCUUA-5′	SEQ ID NO. 1140
3′-UAGAGUAAAUUCCUUACUGUGU-5′	SEQ ID NO. 1141
3′-UCUGUUACGAUUCCUUUAUCCC-5′	SEQ ID NO. 1142
3′-UUUCGUUACUUUCUCAUACCCCUC-5′	SEQ ID NO. 1143
3′-AACCAGACUCCUUACACGGACGA-5′	SEQ ID NO. 1144
3′-UAGUUACUUGUUUCUCCUUUAU-5′	SEQ ID NO. 1145
3′-GUCUCUCUCCGUUUAAUUUUUC-5′	SEQ ID NO. 1146
3′-GUGUUUAACUUCUACUGUCUCU-5′	SEQ ID NO. 1147
3′-UUUGUUCUUCACGAAUACUCUC-5′	SEQ ID NO. 1148
3′-AAAAAAAGUUUACGUAGAUAGUU-5′	SEQ ID NO. 1149
3′-GUCUUUAAGCUUCUUUAUUUUAC-5′	SEQ ID NO. 1150
3′-GUCGGAUUAGUCUGGUUUACUU-5′	SEQ ID NO. 1151
3′-CCUGCCUAAUUCUUUCUUCUCA-5′	SEQ ID NO. 1152
3′-ACCUCAACUAUUCCCCUUCCCU-5′	SEQ ID NO. 1153
3′-UGUCUAAACUUUAUUAACUUCC-5′	SEQ ID NO. 1154
3′-ACGUACACAUUUACCGAGAAC-5′	SEQ ID NO. 1155
3′-GAAAAGGACUUUCACGGUCGU-5′	SEQ ID NO. 1156
3′-UUCUGUUCUUUACCGGUCAUCC-5′	SEQ ID NO. 1157
3′-GACGUAAACUUCUAAAUUCUAAC-5′	SEQ ID NO. 1158
3′-GGUAAUAGGUUUCCAGAUGUUU-5′	SEQ ID NO. 1159
3′-ACUCUGAAGGUUCUAGUUCUAC-5′	SEQ ID NO. 1160
3′-CGUCCUCACCUAUCUAAGAUGU-5′	SEQ ID NO. 1161
3′-UUUCGUUUAACAUCUUUUCUAA-5′	SEQ ID NO. 1162
3′-ACGUCCCUUCUUGUGUCUAGAG-5′	SEQ ID NO. 1163
3′-AGUUUACGUACUUCUGUAAGAA-5′	SEQ ID NO. 1164
3′-UCUUCAAUAUUCCUACUACCU-5′	SEQ ID NO. 1165
3′-GACGGGGUAGCCACUUCGAGG-5′	SEQ ID NO. 1166
3′-UUAUGGUCGGAAGGUAAAGUCUUA-5′	SEQ ID NO. 1167
3′-UUACUUAGGUUUAGUUUCCU-5′	SEQ ID NO. 1168
3′-UACGGAACAAAGAUGAUUAUG-5′	SEQ ID NO. 1169
3′-ACUCAACGGUAAGUGGUAACU-5′	SEQ ID NO. 1170
3′-UAUGUAACUUCAAAAUGUAAA-5′	SEQ ID NO. 1171
3′-CACACUACCCUUACCAACCUCAUA-5′	SEQ ID NO. 1172
3′-UAUACGUGUUUGUCUUACACA-5′	SEQ ID NO. 1173
3′-ACCUAAACAACGGUUAAAGU-5′	SEQ ID NO. 1174
3′-UAAUAUUUUCCUUCCAGAGU-5′	SEQ ID NO. 1175
3′-GGUUUCUCCCUUCUGCUUUC-5′	SEQ ID NO. 1176
3′-AUAUAUUUAUCUUGUCCUUGUA-5′	SEQ ID NO. 1177
3′-UGUUAUUUUUCAACCUCUUUGU-5′	SEQ ID NO. 1178
3′-UUUCGGUACCUUGUUUACCGAC-5′	SEQ ID NO. 1179
3′-CCAGAUGUUUUGUAUGAAACUCUUU-5′	SEQ ID NO. 1180
3′-UUAUCAAAUGAACUUAUUAUGU-5′	SEQ ID NO. 1181
3′-AAGUUCUACCUCUUUCCCUUCU-5′	SEQ ID NO. 1182
3′-UUUUCUUUAUGUGGUUUUGUCA-5′	SEQ ID NO. 1183
3′-UUGGAUUUAAAGAGGGUCUAAA-5′	SEQ ID NO. 1184
3′-UGUUGGAUGAAAGAGUCAUGUCU-5′	SEQ ID NO. 1185
3′-UUUAAGUUUGUUCCUCUAGUAA-5′	SEQ ID NO. 1186
3′-ACCAGUCCAAUAAGACCGUAAA-5′	SEQ ID NO. 1187
3′-GUUGGACCUUGGACCUUGGA-5′	SEQ ID NO. 1188
3′-GGUCGUGACUCUCCCACUGACA-5′	SEQ ID NO. 1189
3′-CUUUAGUUGGACUUACCAAA-5′	SEQ ID NO. 1190
3′-AAUAGUUUAUGAACGAUAUAUG-5′	SEQ ID NO. 1191
3′-GAAAAGAAUUUUUAAGGUCGCG-5′	SEQ ID NO. 1192
3′-UCUCUUCCUAUAAGAGACCAG-5′	SEQ ID NO. 1193
3′-CCCCUCUGUGUGUUUAAGUCUG-5′	SEQ ID NO. 1194
3′-ACUAAUAACGACGAUCUUUGUAU-5′	SEQ ID NO. 1195
3′-ACUAAUAACGACGAUCUUUGUA-5′	SEQ ID NO. 1196
3′-ACCUCUUUCGGUUGUUCUAUUUU-5′	SEQ ID NO. 1197
3′-UGUUUCUUGUACUUUUUUUGUUC-5′	SEQ ID NO. 1198
3′-UCCCGUUCGAAAGGGUUUACAGA-5′	SEQ ID NO. 1199
3′-UCCCGUUCGAAAGGGUUUACAG-5′	SEQ ID NO. 1200
3′-GGUUUUGAUGUAUGACCACCCU-5′	SEQ ID NO. 1201
3′-UCCGUUUCACCACACACACACG-5′	SEQ ID NO. 1202
3′-AGUUUCUCUUUCUGUACUGGU-5′	SEQ ID NO. 1203
3′-UGAAACAUUAGGGUACUUAGG-5′	SEQ ID NO. 1204
3′-AAAGUCCGUCUUACUUACGUC-5′	SEQ ID NO. 1205
3′-CUUUGUGUCCCUUGUCUCUUU-5′	SEQ ID NO. 1206
3′-UUCCUUCUAGAGUAAACUCCU-5′	SEQ ID NO. 1207
3′-CUAUCAUUCACCUUCUCUACUU-5′	SEQ ID NO. 1208
3′-GUAUACUUUCUUACACGUUGUA-5′	SEQ ID NO. 1209
3′-UAUUAUGAUCAUCAUUGUCAUU-5′	SEQ ID NO. 1210
3′-AACUGACUUCUAGGUCUACUU-5′	SEQ ID NO. 1211
3′-UUUUUACUACUGGUUAAGAGU-5′	SEQ ID NO. 1212
3′-AUACCUUAAGAGAGAAUGACU-5′	SEQ ID NO. 1213
3′-UUUUUUGUUUCUAACUCAUUCU-5′	SEQ ID NO. 1214
3′-UUCGUUGGUCCUCUAACCAAGU-5′	SEQ ID NO. 1215
3′-GGUCUCCUGUUCUCGAGAACAA-5′	SEQ ID NO. 1216
3′-CUUUCUUGUAAGAAAAGUACAC-5′	SEQ ID NO. 1217
3′-GACAUUACUCUUACCCUCUGGA-5′	SEQ ID NO. 1218
3′-CCUUUAACACUUUUAAGUUACC-5′	SEQ ID NO. 1219
3′-AAAACGAAACACAACAAAACGAC-5′	SEQ ID NO. 1220
3′-UCCUGAAGCUCUUUAUACAACU-5′	SEQ ID NO. 1221
3′-UUUGUUGUAUUGUUGUUGUUAUU-5′	SEQ ID NO. 1222
3′-UUUUACGACUCCUAUACCCGUU-5′	SEQ ID NO. 1223
3′-AAAGUGGUAAUGGAAGAGAAGG-5′	SEQ ID NO. 1224
3′-AGAAUAAAGAAGUCUCUGUUAC-5′	SEQ ID NO. 1225
3′-UCUCUUUUAUGAACUUUUAACAC-5′	SEQ ID NO. 1226
3′-UGUCUUUACAGUGACUCUCCUC-5′	SEQ ID NO. 1227
3′-UUUCCCCCAUCCCUGUUACCAC-5′	SEQ ID NO. 1228
3′-CUGAUGUCUAUAUGUAUAUCUA-5′	SEQ ID NO. 1229
3′-CUUUUUCCUCUCACUCUCUGUU-5′	SEQ ID NO. 1230
3′-AUCUAUAUUUACACUUUCUAAU-5′	SEQ ID NO. 1231
3′-AGUCUGUCGACGGGUCUCCCGU-5′	SEQ ID NO. 1232
3′-UGAAUGGUCAGAGUAGAAGAU-5′	SEQ ID NO. 1233
3′-AAAAGAUAGGGAGUCUUUUAGG-5′	SEQ ID NO. 1234
3′-GAAACUAGAGCCCGAACUCU-5′	SEQ ID NO. 1235
3′-AGAGAGACGGAACAUCAACC-5′	SEQ ID NO. 1236
3′-AUAUUGAAUAAUGAAGUCUU-5′	SEQ ID NO. 1237
3′-UCUUUAGUAUAGUUUAGGAA-5′	SEQ ID NO. 1238
3′-AAGUCUGUCUAGUCUGGAGU-5′	SEQ ID NO. 1239
3′-UUAUAGGUCUUACCAAAGAC-5′	SEQ ID NO. 1240
3′-UUCAGUUGUACUUUUUUUGUC-5′	SEQ ID NO. 1241
3′-ACUUUUUUUGUUCUAGAAUU-5′	SEQ ID NO. 1242
3′-CCCCCCAAGAAAAACUUUUU-5′	SEQ ID NO. 1243
3′-CUCUACCGGUUCCACCCUCU-5′	SEQ ID NO. 1244
3′-AAAAAUGGUUAUCAUCUCCC-5′	SEQ ID NO. 1245
3′-CACGAGGAGUACUUUACAGACA-5′	SEQ ID NO. 1246
3′-AUGGUGGAAUUUAUAGUCUC-5′	SEQ ID NO. 1247
3′-GAGUCGGUAUUUUUACUUGC-5′	SEQ ID NO. 1248
3′-UAACGUCUUUCAAAGAGGUUUU-5′	SEQ ID NO. 1249
3′-UCUGACCUGGUCGAUACCUUAG-5′	SEQ ID NO. 1250
3′-UACAUUAGUGGAAUAUGUACUUG-5′	SEQ ID NO. 1251
3′-CCUUCCUGAACCAUUUCAAG-5′	SEQ ID NO. 1252
3′-UUUAGGACUCCGUGAAGUUGUA-5′	SEQ ID NO. 1253

TABLE 2-continued

Antisense sequence listing of the target of the RNA virus	
Antisense fragment coding sequence	ID number
3′-CAGACAGUAGAGUGACCUAG-5′	SEQ ID NO. 1254
3′-ACCCGUGUCAACAGUGACGA-5′	SEQ ID NO. 1255
3′-UUUGUAACGUCUGUCCUAUC-5′	SEQ ID NO. 1256
3′-ACAUUAAGAUCGGACUCAGA-5′	SEQ ID NO. 1257
3′-GGUCCUUUCAGAAGUCUCCUA-5′	SEQ ID NO. 1258
3′-AUUUUCUAGAAAAGAACAGA-5′	SEQ ID NO. 1259
3′-UCUGUUUAUUCCAGUCCUCU-5′	SEQ ID NO. 1260
3′-UCUGUUGUGGGUGAGGAAGA-5′	SEQ ID NO. 1261
3′-AUCCAAGUUCAGACGGUCUAUGU-5′	SEQ ID NO. 1262
3′-GAAUGGUCAGAGUAGAAGAUG-5′	SEQ ID NO. 1263
3′-CCGGAACGAGAAGUCUCUCC-5′	SEQ ID NO. 1264
3′-GUACGUCGAUCUUGGUACUG-5′	SEQ ID NO. 1265
3′-CCCCUUCUUUUCACCAUCCGU-5′	SEQ ID NO. 1266
3′-UGUCCUAUCUCGUCUAAAAA-5′	SEQ ID NO. 1267
3′-AACUUUUACUUGGAACUACU-5′	SEQ ID NO. 1268
3′-GUACUCGUUCUAGAAACAGUU-5′	SEQ ID NO. 1269
3′-AGAACACUGUAAAAAUGGUUA-5′	SEQ ID NO. 1270
3′-GUCCUUGUGUUCUUGGUUUC-5′	SEQ ID NO. 1271
3′-AAGUGUAAUUUUUUCACUAU-5′	SEQ ID NO. 1272
3′-GACAACCUUACCGGUCCUAC-5′	SEQ ID NO. 1273
3′-UUCCACCUCUUGAGUCUCAAA-5′	SEQ ID NO. 1274
3′-CGUAAACCUUCCAUAGAACG-5′	SEQ ID NO. 1275
3′-GAGAUAAAGAACGUGAACAC-5′	SEQ ID NO. 1276
3′-UUCUUCUCUGGUACACAUCAAUA-5′	SEQ ID NO. 1277
3′-UAUUACGUAAACCUUCCAUA-5′	SEQ ID NO. 1278
3′-GAUACUUCAGUAGUUUUAUA-5′	SEQ ID NO. 1279
3′-AAGAGUAAAAACAACAAAUAAA-5′	SEQ ID NO. 1280
3′-UAUUGUCUGGAUAUUGAAUA-5′	SEQ ID NO. 1281
3′-UCUCUCUGUGUUCCGAUUCU-5′	SEQ ID NO. 1282
3′-AAUCAGGUCUCUCGUCUUUU-5′	SEQ ID NO. 1283
3′-GUGACGGAGGAAGUCGUUAGU-5′	SEQ ID NO. 1284
3′-AUACUUCAGUAGUUUUAUAA-5′	SEQ ID NO. 1285
3′-GUAAUUUUUUCACUAUCUAU-5′	SEQ ID NO. 1286
3′-UCUCUCGUAGGUUUCCCUCAC-5′	SEQ ID NO. 1287
3′-UUUUUUACAUGGUCCACACU-5′	SEQ ID NO. 1288
3′-UUGUACUCGUUCUAGAAACA-5′	SEQ ID NO. 1289
3′-UUAGUGUAAGAAAGUGGUCUU-5′	SEQ ID NO. 1290
3′-GGAGUGAGAAUAAAGUAGGU-5′	SEQ ID NO. 1291
3′-GUAAGUGAAACAUCCUACGA-5′	SEQ ID NO. 1292
3′-UAGUCUUUCCGAAAUAUACUG-5′	SEQ ID NO. 1293
3′-ACAUAAAUAUUUUCUGUUCCA-5′	SEQ ID NO. 1294
3′-GAGUAAAAACAACAAAUAAA-5′	SEQ ID NO. 1295
3′-ACGGUUCGAACACAAGUUGU-5′	SEQ ID NO. 1296
3′-ACCCGAGACUGUCCUCCGUAC-5′	SEQ ID NO. 1297
3′-UUCAAUUAAUGGAAAUGUAA-5′	SEQ ID NO. 1298
3′-AUGAUACUACAUAGAUAGAU-5′	SEQ ID NO. 1299
3′-UCCUCCCAUAAGAAGACAUA-5′	SEQ ID NO. 1300
3′-CUUGGGUCUCCUUGGGGGUG-5′	SEQ ID NO. 1301
3′-GUGACGGAGGAAGUCGUUAGU-5′	SEQ ID NO. 1302
3′-UCUCGAGUUCUUCCUCUGUU-5′	SEQ ID NO. 1303
3′-UUCUCCCCGAGGAGAUACUU-5′	SEQ ID NO. 1304
3′-AGAUGACGAAAUCCACUGCA-5′	SEQ ID NO. 1305
3′-UCUACCCACCUAGUUCUCCA-5′	SEQ ID NO.1306
3′-UUGCCACUGCUCCGACUCCU-5′	SEQ ID NO.1307
3′-GUCUCCUACAUAAAAGACAG-5′	SEQ ID NO.1308
3′-GUGUAGGUGACGGAGGAAGU-5′	SEQ ID NO.1309
3′-UCCCUACAGAACACUGUAAAAA-5′	SEQ ID NO.1310
3 ‘-GAAGUCUUUCGUUCAGUAAGAU-5’	SEQ ID NO. 1311
3′-AUGUAGAGUCGGUAUUUUUAC-5′	SEQ ID NO. 1312
3′-AAUGACUCACGUCCCCGGGACU-5′	SEQ ID NO. 1313
3′-AGUUGAAAGGGUUGGGAGGU-5′	SEQ ID NO. 1314
3′-GUCUCCCUGUCCCUCCCUCCA-5′	SEQ ID NO. 1315
3′-UCAGUCUUGAACCUUACUCUA-5′	SEQ ID NO. 1316
3′-AGUUUCUAAUCUCAGUUGUCU-5′	SEQ ID NO. 1317
3′-GUACUUGACCCAUAUGUUCAA-5′	SEQ ID NO.1318
3′-GACUACUGUACGACCUCUUCU-5′	SEQ ID NO.1319
3′-ACCAGUGCACAAGUUAGAGUA-5′	SEQ ID NO.1320
3′-AAUACUUCUGACAAGUCCUGA-5′	SEQ ID NO. 1321
3′-GACCACCUCUAUUUUGCAUGACU-5′	SEQ ID NO. 1322
3′-AACUAACAAAAAGAGUAAAA-5′	SEQ ID NO. 1323
3′-ACCAAAGACCCCGACACGGAG-5′	SEQ ID NO. 1324
3′-CUCGGUCCCGUCCUCUGUCG-5′	SEQ ID NO. 1325
3′-CCCAAGAAAAACUUUUUUUU-5′	SEQ ID NO. 1326

[0029] The second object of the present invention is to provide a primer composition for constructing any of the above-mentioned target sequences of the RNA virus.

[0030] Further, The primer composition of a part of the target sequence of the RNA virus comprises any one or more of the following groups: the primers of the target sequence SEQ ID NO. 1 are SEQ ID NO. 616 - SEQ ID NO. 619; and/or, the primers of the target sequence SEQ ID NO. 2 are SEQ ID NO. 620 - SEQ ID NO. 623; and/or, the primers of the target sequence SEQ ID NO. 3 are SEQ ID NO. 624 - SEQ ID NO. 627; and/or, the primers of the target sequence SEQ ID NO. 4 are SEQ ID NO. 628 - SEQ ID NO. 631; and/or, the primers of the target sequence SEQ ID NO. 5 are SEQ ID NO. 632 - SEQ ID NO. 635; and/or, the primers of the target sequence SEQ ID NO. 7 are SEQ ID NO. 636 - SEQ ID NO. 639; and/or, the primers of the target sequence SEQ ID NO. 8 are SEQ ID NO. 640 - SEQ ID NO. 643; and/or, the primers of the target sequence SEQ ID NO. 10 are SEQ ID NO. 644 - SEQ ID NO. 647; and/or, the primers of the target sequence SEQ ID NO. 11 are SEQ ID NO. 648 - SEQ ID NO. 651; and/or, the primers of the target sequence SEQ ID NO. 12 are SEQ ID NO. 652 - SEQ ID NO. 655; and/or, the primers of the target sequence SEQ ID NO. 13 are SEQ ID NO. 656 - SEQ ID NO. 659; and/or, the primers of the target sequence SEQ ID NO. 14 are SEQ ID NO. 660 - SEQ ID NO. 663; and/or, the primers of the target sequence SEQ ID NO. 15 are SEQ ID NO. 664 - SEQ ID NO. 667; and/or, the primers of the target sequence SEQ ID NO. 16 are SEQ ID NO. 668 - SEQ ID NO. 671; and/or, the primers of the target sequence SEQ ID NO. 17 are SEQ ID NO. 672 - SEQ ID NO. 675; and/or, the primers of the target sequence SEQ ID NO. 18 are SEQ ID NO. 676 - SEQ ID NO. 679; and/or, the primers of the target sequence SEQ ID NO. 19 are SEQ ID NO. 680 - SEQ ID NO. 683; and/or, the primers of the target sequence SEQ ID NO. 20 are SEQ ID NO. 684 - SEQ ID NO. 687; and/or, the primers of the target sequence SEQ ID NO. 21 are SEQ ID NO. 688 - SEQ ID NO. 691; and/or, the primers of the target sequence SEQ ID NO. 22 are SEQ ID NO. 692 - SEQ ID NO. 695; and/or, the primers of the target sequence SEQ ID NO. 23 are SEQ ID NO. 696 - SEQ ID NO. 699; and/or, the primers of the target sequence SEQ ID NO. 24 are SEQ ID NO. 700 - SEQ ID NO. 703; and/or, the primers of the target sequence SEQ ID NO. 25 are SEQ ID NO. 704 - SEQ ID NO. 707; and/or, the primers of the target sequence SEQ ID NO. 26 are SEQ ID NO. 708 - SEQ ID NO. 711.

[0031] Further, The protective base and EcoRI restriction site sequence CGGAATTC are added to 5′ end of the upstream primer, and the protective base and BamHI restriction site sequence CGGGATCC are added to 5′ end of the downstream primer.

[0032] Further, the specific sequences of the above-mentioned primers are shown in the following table:

TABLE 3

Amplification primer sequence listing of the target sequence of the RNA virus

Virus type	Fragment number	Primer number	Amplification primer sequence	ID number
Severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2	SARS-CoV-2-HIS-1	F1-23	5′ -attctagagctagcgaattctcatcaacttgtatgatgtgttacaaacgtaatagagca-3′	SEQ ID NO. 616
		R1	5′ -gaccttctaacaccattaacaatagttgtacattcgactcttgttgctctattacg ttt-3′	SEQ ID NO. 617
		R2	5′ -gtagtttgcaaaagcctttacctccattagcatagacataaaaggaccttctaacacca-3′	SEQ ID NO. 618
		R3	5′ -tccttcgcggccgcggatcacaattaacacaattccaattgtgtagtttgcaaaag c-3′	SEQ ID NO. 619
	SARS-CoV-2-HIS-2	F1-23	5′ -attctagagctagcgaattcaacaacattatcaacaatgcaagagatggttgtgtt c-3′	SEQ ID NO. 620
		R1	5′ -aaccattagtttggctgctgttgtaagaggtattatgttcaagggaacacaaccatctc-3′	SEQ ID NO. 621
		R2	5′ -gtaccatcacacgtatttttatatgtgttatagtctggtatgacaaccattagtttggc-3′	SEQ ID NO. 622
		R3	5′ -tccttcgcggccgcggatcCaatgctgatgcataagtaaatgttgtaccatcacacgta-3′	SEQ ID NO. 623
	SARS-CoV-2-HIS-3	F1-23	5′ -attctagagctagcgaattccttaacaaagttgttagtacaactactaacatagttaca-3′	SEQ ID NO. 624
		R1	5′ -aagaaataaggcatataattagtacaaacacggtttaaacaccgtgtaactatgttagt-3′	SEQ ID NO. 625
		R2	5′ -aatttgtacttctagtaaaagtacacaattgtagcaataaagtaaagaaataaggcata-3′	SEQ ID NO. 626
		R3	5′ -tccttcgcggccgcggatcctcggcatagatgctttaattctagaatttgtacttc tag-3′	SEQ ID NO. 627
	SARS-CoV-2-HIS-4	F1-23	5′ -attctagagctagcgaattcggagtacgatcgagtgtacagtgaacaatgctagggaga-3′	SEQ ID NO. 628
		R1	5′ -actaaaattaattttacacattagggctcttccatataggcagctctccctagcattgt-3′	SEQ ID NO. 629
		R2	5′ -gtcattctcctaagaagctattaaaatcacatggggatagcactactaaaattaatttt-3′	SEQ ID NO. 630
		R3	5′ -tccttcgcggccgcggatcCttttttttttttttttttttttgtcattctccta aga-3′	SEQ ID NO. 631
	SARS-CoV-2-HIS-5	F1-23	5′ -attctagagctagcgaattcgttaataattggttgaagcagttaattaaagttacactt-3′	SEQ ID NO. 632
		R1	5′ -acaggtgttattaaatagaaaatagcagcaacaaaaaggaacacaagtgtaactttaat-3′	SEQ ID NO. 633
		R2	5′ -ctatgatttcacttgaaaagtcagtatgtttagacatgacatgaacaggtgttattaaa-3′	SEQ ID NO. 634
		R3	5′ -tccttcgcggccgcggatcccaccaccatcaatagccttgtatcctatgatttcacttg-3′	SEQ ID NO. 635
severe acute respiratory syndrome-related coronavirus SARS-CoV	SARS-CoV-HIS -1	F1	5′ -ctccctctggaatttggtgcctcagctgaaacagttcgagttgaggaagaagaagagga-3 ’	SEQ ID NO. 636
		R1	5′ -tggctcaatctctgattgctcagtagtatcatccagccagtcttcctcttcttctt cct-3′	SEQ ID NO. 637
		F2	5′ -attctagagctagcgaattcctccctctggaatttggtgc-3′	SEQ ID NO. 638
		R2	5′ -tccttcgcggccgcggatcatggctcaatctctgattgct-3′	SEQ ID NO. 639
	SARS-CoV-HIS -2	F1	5′ -tatgggttgggattatccaaaatgtgacagagccatgcctaacatgcttaggataatgg-3′	SEQ ID NO. 640
		R1	5′ -aagttacagcaagtgttatgtttgcgagcaagaacaagagaggccattatcctaagca-3′	SEQ ID NO. 641
		F2	5′ -attctagagctagcgaattctatgggttgggattatccaa-3′	SEQ ID NO. 642
		R2	5 ’ -tccttcgcggccgcggatcaaagttacagcaagtgttatg-3′	SEQ ID NO. 643
Middle East respiratory syndrome coronavirus (MERS-CoV)	MERS-CoV-HIS -1	F1	5 ‘-gtgttggctggactgctggcttatcctcctttgctgctattccatttgcacagagtatc-3’	SEQ ID NO. 644
		R1	5′ -gaaagaacctgttgagtaatgccaacaccgtttaacctataaaagatactctgtgcaaa-3′	SEQ ID NO. 645
		F2	5 ‘-attctagagctagcgaattcgtgttggctggactgctggc-3’	SEQ ID NO. 646
		R2	-5′ -tccttcgcggccgcggatcagaaagaacctgttgagtaat-3′	SEQ ID NO. 647
	MERS-CoV-HIS -2	F1	5′ -aataaagtaaaacgtgcttttgcagattacacccagtgtgctgtaattgctgttgttgc-3′	SEQ ID NO. 648
		R1	5′ -gtatagaggtaacaaagcagatgcacaagctattaagaacagcagcaacaacagcaatt-3′	SEQ ID NO. 649
		F2	5′ -attctagagctagcgaattcaataaagtaaaacgtgcttt-3′	SEQ ID NO. 650
		R2	5′ -tccttcgcggccgcggatcagtatagaggtaacaaagcag-3′	SEQ ID NO. 651
Zika virus	Zika-HIS-1	F1	5′ -tgagaggagagtgccagagttgtgtgtacaacatgatgggaaaaagagaaaagaaa caa-3′	SEQ ID NO. 652
		R1	5′ -tataccagatggcgcggctgcccttggcctttccaaattccccttgtttcttttct ctt-3′	SEQ ID NO. 653
		F2	5′ -gaagattctagagctagcgaattctgagaggagagtgccagagtt-3′	SEQ ID NO. 654
		R2	5′ -cagatccttcgcggccgcggatcctataccagatggcgcggctgc-3′	SEQ ID NO. 655
	Zika-HIS-2	F1	5′ -gtgatcaaaaatgggagttatgttagtgccatcacccaagggaggagggaggaaga gac-3′	SEQ ID NO. 656
		R1	5′ -ctgcttcttcttcagcatcgaaggctcgaagcactcaacaggagtctcttcctccctcc-3′	SEQ ID NO. 657
		F2	5′ -gaagattctagagctagcgaattcgtgatcaaaaatgggagttat-3′	SEQ ID NO. 658
		R2	5′ -cagatccttcgcggccgcggatccctgcttcttcttcagcatcga-3′	SEQ ID NO. 659
	Zika-HIS-3	F1	5′ -ctagtggtgcaactcattcggaatatggaggctgaggaagttctagagatgcaagactt-3′	SEQ ID NO. 660
		R1	5′ -ctgcaaccagttggtcactttctctgacctccgcagcagccacaagtcttgcatctcta-3′	SEQ ID NO. 661
		F2	5′ -gaagattctagagctagcgaattcctagtggtgcaactcattcgg-3′	SEQ ID NO. 662
		R2	5′ -cagatccttcgcggccgcggatccctgcaaccagttggtcacttt-3′	SEQ ID NO. 663
Ebola virus	Ebola-HIS-1	F1	5′ -aatactccaccaacagatgatgtatcaagtcctcaccgactcattctaccattttttaa-3′	SEQ ID NO. 664
		R1	5′ -ttcttgggcatcttgatcatgtgcatggttgtgatttcccaatttaaaaaatggtagaa-3′	SEQ ID NO. 665
		F2	5′ -gaagattctagagctagcgaattcaatactccaccaacagatgat-3′	SEQ ID NO. 666
		R2	5′ -cagatccttcgcggccgcggatccttcttgggcatcttgatcatg-3′	SEQ ID NO. 667
	Ebola-HIS-2	F1	5′ -ttttctaaatccagaaaagtgtttttatcgaaacttcggagatcctgtgacttctggac-3′	SEQ ID NO. 668
		R1	5′ -tctttcatgttaaccatttctaggtacacccgtagctggaaaagtccagaagtcacagg-3′	SEQ ID NO. 669
		F2	5′ -gaagattctagagctagcgaattctt	SEQ ID

TABLE 3-continued

Amplification primer sequence listing of the target sequence of the RNA virus

Virus type	Fragment number	Primer number	Amplification primer sequence	ID number
			ttctaaatccagaaaagtg-3′	NO. 670
		R2	5′ -cagatccttcgcggccgcggatcctc tttcatgttaaccatttct-3 '	SEQ ID NO. 671
	Ebola-HIS-3	F1	5′ -gaagattctagagctagcgaattcag atctgagagagaaaaatctc-3′	SEQ ID NO. 672
		R1	5′ -cagatccttcgcggccgcggatccta ttattaattgctcatttaa - 3 '	SEQ ID NO. 673
		F2	5′ -agatctgagagagaaaaatctcaggg ttactctaaggagaaatattatttttaaaa ttt-3′	SEQ ID NO. 674
		R2	5′ -tattattaattgctcatttaagataa gtggtcagcattcaagtaaattttaaaaat aat-3′	SEQ ID NO. 675
HIV	HIV-1-HIS-1	F1	5′ -tttaagaccaatgacttacaaggcag ctgtagatcttagccactttttaaaagaaa agg-3′	SEQ ID NO. 676
		R1	5′ -atatcttgtcttctttgggagtgaat tagcccttccagtcccccctttcttttaa aaa-3′	SEQ ID NO. 677
		F2	5 ’ -gaagattctagagctagcgaattctt taagaccaatgacttaca-3′	SEQ ID NO. 678
		R2	5′ -cagatccttcgcggccgcggatccat atcttgtcttctttggga-3′	SEQ ID NO. 679
	HIV-1-HIS-2	F1	5′ -aagaaaaaataaaagcattagtagaa atttgtacagagatggaaaaggaagggaaa att-3′	SEQ ID NO. 680
		R1	5′ -caaatactggagtattgtatggattt tcaggcccaatttttgaaattttcccttcc ttt-3′	SEQ ID NO. 681
		F2	5′ -gaagattctagagctagcgaattcaa gaaaaaataaaagcatta-3′	SEQ ID NO. 682
		R2	5′ -cagatccttcgcggccgcggatccca aatactggagtattgtat-3′	SEQ ID NO. 683
	HIV-1-HIS-3	F1	5′ -ggtctatctggcatgggtaccagcac acaaaggaattggaggaaatgaacaagtag ata-3′	SEQ ID NO. 684
		R1	5′ -ccatctaaaaatagtactttcctgat tccagcactgactaatttatctacttgttc att-3′	SEQ ID NO. 685
		F2	5′ -gaagattctagagctagcgaattcgg tctatctggcatgggtac-3′	SEQ ID NO. 686
		R2	5′ -cagatccttcgcggccgcggatcccc atctaaaaatagtacttt-3′	SEQ ID NO. 687
	HIV-1-HIS -4	F1	5′ -cctgagtgggagtttgttaatacccc tcccttagtgaaattatggtaccagttaga gaa-3′	SEQ ID NO. 688
		R1	5′ -tgccccatctacatagaaggtttctg ctcctactatgggttctttctctaactggt acc-3′	SEQ ID NO. 689
		F2	5′ -gaagattctagagctagcgaattccc tgagtgggagtttgttaat-3′	SEQ ID NO. 690
		R2	5′ -cagatccttcgcggccgcggatcctg ccccatctacatagaagg-3′	SEQ ID NO. 691
	HIV-1-HIS-5	F1	5′ -ggagaattagatcgatgggaaaaaat tcggttaaggccagggggaaagaaaaaata taa-3′	SEQ ID NO. 692
		R1	5′ -gaatcgttctagctccctgcttgccc atactatatgttttaatttatattttttct ttc-3′	SEQ ID NO. 693
		F2	5′ -gaagattctagagctagcgaattcgg agaattagatcgatggga-3′	SEQ ID NO. 694
		R2	5′ -cagatccttcgcggccgcggatccga atcgttctagctccctgc-3′	SEQ ID NO. 695
	HIV-1-HIS-6	F1	5′ -cagaagcaggggcaaggccaatggac atatcaaatttatcaagagccatttaaaaa tct-3′	SEQ ID NO. 696
		R1	5′ -attagtgtgggcacccctcattcttg catattttcctgttttcagatttttaaatg gct-3′	SEQ ID NO. 697
		F2	5′ -gaagattctagagctagcgaattcca gaagcaggggcaaggcca-3′	SEQ ID NO. 698
		R2	5′ -cagatccttcgcggccgcggatccat tagtgtgggcacccctca-3′	SEQ ID NO. 699
	HIV-2-HIS-1	F1	5′ -aagtgtgtcagaaagtacaacccaac taacatcttagacataaaacagggaccaaa aga-3′	SEQ ID NO. 700
		R1	5′ -cctcaagcttttgtagaacctgtcta catagctttggaacggttcttttggtccct gtt-3′	SEQ ID NO. 701
		F2	5′ -gaagattctagagctagcgaattcaa gtgtgtcagaaagtacaa-3′	SEQ ID NO. 702
		R2	5′ -cagatccttcgcggccgcggatcccc tcaagcttttgtagaacc-3′	SEQ ID NO. 703
	HIV-2-HIS-2	F1	5′ -caaagccagggagtagtagaagcaat gaatcaccacctaaagaatcagataagtag aat-3′	SEQ ID NO. 704
		R1	5′ -tgccatcagtactattgtttctattg tatttgcctgttctctaattctacttatct gat-3′	SEQ ID NO. 705
		F2	5′ -gaagattctagagctagcgaattcca aagccagggagtagtaga-3′	SEQ ID NO. 706
		R2	5′ -cagatccttcgcggccgcggatcctg ccatcagtactattgttt-3′	SEQ ID NO. 707
	HIV-2-HIS-3	F1	5′ -gggtggctgtggaagctagtatcagt agaactctcacaagaggcagaggaagatga ggc-3′	SEQ ID NO. 708
		R1	5′ -atcatcatgtctgcttgtttgtgctg ggtgtactaagcagttggcctcatcttcct ctg-3′	SEQ ID NO. 709
		F2	5′-gaagattctagagctagcgaattcgg gtggctgtggaagctagt-3′	SEQ ID NO. 710
		R2	5′-cagatccttcgcggccgcggatccat catcatgtctgcttgttt-3′	SEQ ID NO. 711

[0033] In the third aspect, the present invention provides an RNA drug against viruses, characterized in that, the RNA drug comprises the reverse complementary sequence of any of the above-mentioned target sequences of the RNA virus, and cholesterol modification and four phosphorothioate backbone modifications are made at the 3′ end of the reverse complementary sequence of any of the above-mentioned target sequences of the RNA virus, two phosphorothioate backbone modifications are made at the 5′ end, and methoxy modification is made on the whole chain, or, cholesterol modification and four phosphorothioate backbone modifications are made at the 3′ end of any of the above-mentioned target sequences of the RNA virus, two phosphorothioate backbone modifications are made at the 5′ end, and methoxy modification is made on the whole chain.

[0034] Further, the reverse complementary sequence of the target sequence of the RNA virus comprises reverse complementary RNA sequence or reverse complementary DNA.

[0035] Further, the RNA drug further comprises a pharmaceutically acceptable carrier or excipient.

[0036] Further, the dosage form of the RNA drug comprises powder, tablet, granule, capsule, solution, aerosol, injection, emulsion or suspension.

[0037] In the fourth aspect, the present invention provides a biomaterial related to any of the above-mentioned target sequences of the RNA virus. The biomaterial is selected from one of the following A) - B):

[0038] A) a DNA and/or RNA molecule that is complementary to any of the above-mentioned target sequences of the RNA virus;

[0039] B) an expression cassette, a recombinant vector, a recombinant microorganism, a recombinant cell line containing any of the above-mentioned target sequences of the RNA virus or the DNA molecule described in A).

[0040] It is understandable that the above-mentioned DNA molecule, expression cassette, recombinant vector, recombinant microorganism, and recombinant cell line can all be biomaterials conventionally used in the art, and can all be prepared by conventional methods in the art.

[0041] Further, the biomaterial is a recombinant vector, and the construction steps of the recombinant vector comprise: 1) designing a primer, and amplifying the target sequence of the RNA virus by PCR; 2) digesting the amplified sequence fragment and an expression vector, and ligating a sequence fragment of interest and the expression vector; 3) transferring the ligated product into *Escherichia coli* and cultivating the *Escherichia coli*; 4) after identification, extracting recombinant plasmid and packaging the recombinant plasmid. Specifically, the target sequences of the RNA viruses are shown in Table 1 above, and a part of primer sequences is shown in Table 2 above.

[0042] Further, the expression vector comprises but is not limited to pCDH vector, other vectors such as pCMVp-NEO-BAN vector, pEGFP vector, pEGFT-Actin, pSV2 vector, pCDNA vector, pLVX vector, pAAV vector, pET vector, pDsRed vector, and virus-related recombinant vector backbones for these vectors can be any suitable vectors used in the art.

[0043] Further, the recombinant vector has the function of expressing a virus-related target fragment; wherein, the related target fragment has the function of interacting (binding) with human genome.

[0044] Further, the recombinant vector has target sequences expressing severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), severe acute respiratory syndrome-related coronavirus (SARS-CoV), and middle east respiratory syndrome coronavirus (MERS-CoV). The above-mentioned target sequence fragments can interact (bind) with human genome; specifically, the target sequences comprise but are not limited to: SARS-CoV-2-HIS-1, SARS-CoV-2-HIS-2, SARS-CoV-2-HIS-3, SARS-CoV-2-HIS-4, SARS-CoV-2-HIS-5, SARS-CoV-HIS-1, SARS-CoV-HIS-2, MERS-CoV-HIS-1 and MERS-CoV-HIS-2.

[0045] In the fifth aspect, the present invention provides use of any of the above-mentioned target sequences of the RNA virus. The use is a use in the preparation of an RNA virus detection or diagnostic reagent, a use in the preparation of a drug for preventing or treating a condition caused by an RNA virus, or a use in the preparation of a vaccine against an RNA virus.

[0046] Further, the condition comprises a human disease, an animal disease and zoonosis.

[0047] Further, when the use is a use in the preparation of a drug for preventing or treating a condition caused by the RNA virus, an effective substance that regulates the target sequence is directly screened; alternatively, according to the effect of the gene regulated by the target sequence, an effective substance against the gene and gene product regulated by the target sequence is screened.

[0048] Further, when the use is a use in the preparation of a vaccine against the RNA virus, the target sequence is knocked out during the design process of the vaccine.

[0049] Further, the method for knocking out the target sequence comprises: CRASPER system and/or ribozyme technology.

[0050] CRISPR comes from the immune system of microorganisms. In such engineering editing system, an enzyme is used to cut a small RNA as a guiding tool into DNA, where cut or other changes can be made. Previous studies have shown that CRISPR can make changes or mutations in the genome more efficiently through these interventions, and the efficiency is higher than other gene editing technologies such as TALEN (transcription activator-like effector nuclease). Although CRISPR has many advantages, in the human cancer cell line, it may also produce a large number of "accidentally injured targets", especially the modification of genes that are not desired to be changed.

[0051] Ribozyme technology is a technology by means of a ribozyme, and is mainly used for the design of ribozymes for use. Ribozymes are RNA molecules that can cleave RNA sequence-specifically and can be designed. The designed ribozyme can be used to select specific mRNA fragments, or can bind to specific mRNA to block the expression of mRNA. Therefore, this technology can be used to study the structure of RNA, and can also be used to treat diseases caused by abnormal gene expression.

[0052] Further, the vaccine is a live attenuated vaccine.

[0053] In the sixth aspect, the present invention provides a live attenuated vaccine. The whole genome of the live attenuated vaccine does not contain the above-mentioned target sequences of the RNA virus.

[0054] In the seventh aspect, the present invention provides use of any of the above-mentioned target sequences of the RNA virus in activating related genes at the cellular level and screening therapeutic drugs against the related genes.

[0055] Further, the RNA virus is a coronavirus, specifically severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), severe acute respiratory syndrome-related coronavirus (SARS-CoV), and middle east respiratory syndrome coronavirus (MERS-CoV).

[0056] Further, in the above-mentioned use, the related genes comprise the ACE**2** gene, the coding genes of the hyaluronic acid synthase family HAS**1**, HAS**2**, and HAS**3**, and/or genes within 200 k around the fragment. Further, the genes within 200 k around the fragment comprise but are not limited to FBXO**15**, MYL**9**, KALRN, ATP**8**B**1**, ZHX**2**, IGF**2**R, C**5**AR**1**, EPAS**1** and TIMM**21**. It is understandable that, depending on the type of RNA virus, the related genes activated thereby are also different.

[0057] Further, the drug comprises a miRNA inhibitor.

[0058] Further, the miRNA inhibitor comprises antagomir inhibitor.

[0059] It is understandable that the above-mentioned drug may also comprise other drugs that can inhibit activated target genes and other drugs that can regulate the level of hyaluronic acid (inhibit the synthesis of hyaluronic acid, reduce the concentration of hyaluronic acid, etc.).

[0060] In the eighth aspect, the present invention provides use of the target sequences of the RNA virus in the study of drug targets against diseases caused by the RNA virus.

[0061] Further, the target sequences of the RNA virus in the cells of the diseases caused by the RNA virus are found, and the drug targets are found within 200 k around the target sequence of the RNA virus or the drug targets are found beyond 200 k using the prediction software blast 2.2.30 or bedtools 2.29.2.

[0062] In the ninth aspect, the present invention provides a method for virus detection, which detects the above-mentioned target sequences of the RNA virus.

[0063] Further, the detection of the target sequences comprises RCR amplification and nucleotide sequencing.

[0064] Furthermore, the detection of the target sequences of the RNA virus can be used to determine the diagnosis of viral diseases, determine the pathogenicity and test the susceptibility of the population.

BRIEF DESCRIPTION OF THE DRAWINGS

[0065] FIG. **1** is a running gel electropherogram of 6 target viral vectors related to the coronavirus SARS-CoV-2 amplified by PCR in an embodiment of the present invention.

[0066] FIG. **2** is a schematic diagram of the result of the mRNA level after overexpression of the target fragments of coronavirus in 293T cells by qPCR detection in an embodiment of the present invention; wherein, ***, $p<0.001$.

[0067] FIG. **3** is a schematic diagram of the result of the mRNA level of the gene ACE**2** after overexpression of the target fragments of coronavirus in 293T cells by qPCR detection in an embodiment of the present invention; wherein, **, $p<0.01$, ***, $p<0.001$.

[0068] FIG. **4** is a schematic diagram of the result of the mRNA level of the gene HAS**1** after overexpression of the target fragments of coronavirus in 293T cells by qPCR detection in an embodiment of the present invention; wherein, **, $p<0.01$, ***, $p<0.001$.

[0069] FIG. **5** is a schematic diagram of the result of the mRNA level of the gene HAS**2** after overexpression of the target fragments of coronavirus in 293T cells by qPCR detection in an embodiment of the present invention; wherein, **, $p<0.01$.

[0070] FIG. **6** is a schematic diagram of the result of the mRNA level of the gene HAS**3** after overexpression of the target fragments of coronavirus in 293T cells by qPCR detection in an embodiment of the present invention; wherein, **, $p<0.01$, ***, $p<0.001$.

[0071] FIG. **7** is a schematic diagram of the result of the mRNA level of the surrounding gene FBXO**15** after overexpression of the target fragment SARS-CoV-2-HIS-4 of coronavirus in 293T cells by qPCR detection in an embodiment of the present invention; wherein, ***, $p<0.001$.

[0072] FIG. **8** is a schematic diagram of the result of the mRNA level of the surrounding gene MYL**9** after overexpression of the target fragment SARS-CoV-2-HIS-3 of coronavirus in 293T cells by qPCR detection in an embodiment of the present invention; wherein, ***, $p<0.001$.

[0073] FIG. **9** is a schematic diagram of the result of the mRNA level of the surrounding gene ATP**8B1** after overexpression of the target fragment SARS-CoV-2-HIS-1 of coronavirus in 293T cells by qPCR detection in an embodiment of the present invention; wherein, **, $p<0.01$.

[0074] FIG. **10** is a schematic diagram of the result of the mRNA level of the surrounding gene KALRN after overexpression of the target fragment SARS-CoV-2-HIS-5 of coronavirus in 293T cells by qPCR detection in an embodiment of the present invention; wherein, **, $p<0.01$.

[0075] FIG. **11** is a schematic diagram of the result of the mRNA level of the surrounding genes after overexpression of the target fragment SARS-CoV-2-HIS-6 of coronavirus in 293T cells by qPCR detection in an embodiment of the present invention.

[0076] FIG. **12** is a schematic diagram of the result of the mRNA level of the surrounding genes after overexpression of the target fragment SARS-CoV-HIS-2 of coronavirus in 293T cells by qPCR detection in an embodiment of the present invention; wherein, **, $p<0.01$.***, $p<0.001$.

[0077] FIG. **13** is a schematic diagram of the result of the mRNA level of the surrounding gene after overexpression of the target fragment MERS-CoV-HIS-2 of coronavirus in 293T cells by qPCR detection in an embodiment of the present invention; wherein, **, $p<0.01$.

[0078] FIG. **14** is a schematic diagram of the result of the mRNA level of the surrounding genes after overexpression of target fragments of zika virus in 293T cells by qPCR detection in an embodiment of the present invention.

[0079] FIG. **15** is a schematic diagram of the result of the mRNA level of the surrounding genes after overexpression of target fragments of ebola virus in 293T cells by qPCR detection in an embodiment of the present invention.

[0080] FIG. **16** is a schematic diagram of the result of the mRNA level of the surrounding genes after overexpression of HIV-2 target fragments in 293T cells by qPCR detection in an embodiment of the present invention.

[0081] FIG. **17** is a schematic diagram of the result of antagomir on the mRNA level of the surrounding genes after overexpression of the target fragment SARS-CoV-HIS-2 of coronavirus in 293T cells by qPCR detection in an embodiment of the present invention.

[0082] FIG. **18** is a schematic diagram of the result of the inhibitory effect of antagomir on the mRNA level of genes activated by the target fragment MERS-CoV-HIS-2 of coronavirus by qPCR detection in an embodiment of the present invention; wherein, $^{*}<0.05$.

[0083] FIG. **19** is a schematic diagram of the result of the inhibitory effect of antagomir on the mRNA level of genes activated by the target fragment SARS-CoV-2-HIS-4 of coronavirus by qPCR detection in an embodiment of the present invention; wherein, $^{*}<0.05$.

[0084] FIG. **20** is a schematic diagram of the result of the inhibitory effect of antagomir on the mRNA level of genes activated by the target fragment SARS-CoV-2-HIS-3 of coronavirus by qPCR detection in an embodiment of the present invention; wherein, $^{*}<0.05$.

DETAILED DESCRIPTION OF THE INVENTION

[0085] The specific implementations of the present invention will be further described below in conjunction with the drawings and examples. The following examples are only used to illustrate the technical solutions of the present invention more clearly, and cannot be used to limit the scope of protection of the present invention. In experimental methods in the following examples where no specific conditions are indicated, choices can be made according to conventional methods and conditions in the art or commodity instructions; the relevant reagents and biomaterials in the following examples are all commercially available products; The molecular cloning technology in the following examples provides a method for purifying and amplifying specific DNA fragments at the molecular level in the prior art. The coronavirus, zika virus, ebola virus and HIV are mainly used as examples for discussion in the following examples.

Example 1 - Construction of an Overexpression Vector of the Target of the RNA Virus

[0086] This example is the construction of an overexpression vector of the target of the RNA virus, and the steps comprise:

[0087] 1. Sequence acquisition and primer design SARS-CoV-2 gene sequences were found from Nucleotide database Genbank of NCBI, and then the whole genome nucleotide sequences of the virus were Blast-aligned with the whole genome sequence in human, and finally, the virus nucleotide sequence fragments with a similarity of not less than 95% were screened as viral RNA target sequences (hereinafter referred to as targets). 5 sequences that were completely complementary and paired to the human genome and 1 sequence that was not completely complementary to human genes were screened from SARS-CoV-2. For zika virus, ebola virus, HIV, SARS-CoV, MERS-CoV, and other RNA viruses, the same method was used to obtain target sequences. The screened target sequences are shown in Table 1 above. The upstream and downstream primers were determined using primer5 software, respectively, and the protective base and EcoRI restriction site sequence (CGGAATTC) were added to 5′ end of the upstream primer, and the protective base and BamHI restriction site sequence (CGGGATCC) were added to 5′ end of the downstream primer. The primers were synthesized by Shanghai Sunny Biotechnology Co., Ltd. The primer sequences of some targets are shown in Table 3 above.

[0088] 2. Obtainment of the target fragment sequence of interest of the RNA virus Taking severe acute respiratory syndrome-related coronavirus 2 target sequence as an example, the viral target fragment was artificially synthesized by means of homologous recombination. After the primers of F123 and R1 designed according to the sequence were annealed, two rounds of nested PCR were performed using F123 and R2 and F123 and R3, and the gene fragments of interest were amplified with Q5 enzyme. The amplification system and program were as follows:

PCR system	Total volume 50 μl
5 × Reaction buffer	10 μl
dNTPs (10 mM)	1 μl
Upstream primer (10 μM)	2.5 μl
Downstream primer (10 μM)	2.5 μl
cDNA template	1 μl
Q5 polymerase	0.5 μl
ddH2O	32.5 μl

[0089] PCR program: 98° C. for 30 s;

[0090] 98° C. for 10 s, 55-72° C. for 30 s, 72° C. for 30 s/kb, 35 cycles; and 72° C. for 2 min. For severe acute respiratory syndrome-related coronavirus and middle east respiratory syndrome coronavirus, F1 and R1 primers were used to anneal, and then F2 and R2 and the annealed product were subjected to nested PCR to obtain the fragments of interest.

[0091] 3. Recovery, restriction digestion and purification of PCR products The PCR products were detected by electrophoresis in 1% agarose gel, the gel was cut and recovered, and the fragments of interest were recovered using a ordinary agarose gel DNA recovery kit (Tiangen Biotech Co., Ltd.); the enzyme digestion process referred to the enzyme digestion system on NEB website, and the enzyme digestion was carried out at 37° CoVemight, and a PCR product recovery kit (Tiangen Biotech Co., Ltd.) was used for purification and recovery.

[0092] 4. Ligation The digested PCR product and the digested pCDH vector were ligated with T4 ligase according to the following ligation system at 16° CoVemight.

Ligation system	
Reagents	Volume
PCR product	1 μl
Digested pCDH vector	1 μl
T4DNA ligase buffer	1 μl
T4DNA ligase	1 μl
H_2O	6 ul
Total	10 ul

[0093] 5. Transforming and picking monoclonal ligation

[0094] (1) 10 μl of ligation product was added to 50 μl of DH5α competent cells, and incubated on ice for 30 min.

[0095] (2) The competent cells were heat shocked at 42° C. for 90 s, and then immediately placed on ice for 5 min.

[0096] (3) 300 μl of LB liquid medium without antibiotics was added on a clean bench, and the bacteria was shaken on a constant temperature shaker at 37° C. for 30 min.

[0097] (4) 1000 g of bacterial solution was centrifuged for 5 min and the supernatant was discarded. The remaining 50 μl of bacterial solution was spread evenly on the LB solid plate supplemented with ampicillin, and the plate was incubated in a constant temperature incubator at 37° CoVemight.

[0098] (5) An appropriate amount of monoclonal colonies was picked from the overnight-cultured plate, and put into EP tubes containing 200 μl of LB liquid medium supplemented with ampicillin. The bacteria were shaken in a constant temperature shaker at 37° C. for 2 hours, and then subjected to sequencing and identification. Finally, the target band can be obtained by vector PCR (FIG. **1**).

[0099] The results showed that: The length of each target-vector is200-250 bp. FIG. **1** shows the electrophoresis results of the target-vectors containing 6 targets from severe acute respiratory syndrome-related coronavirus 2, respectively. Specifically, HIS**1** is the target-vector containing SARS-CoV-2-HIS-1, and HIS**2** is the target-vector containing SARS-CoV-2-HIS-2, HIS**3** is the target-vector containing SARS-CoV-2-HIS-3, HIS**4** is the target-vector containing SARS-CoV-2-HIS-4, HIS**5** is the target-vector containing SARS-CoV-2-HIS-5, and HIS**6** is the target-vector containing SARS-CoV-2-HIS-6.

[0100] The same operation as above applied to SARS-CoV, MERS-CoV, zika virus, ebola virus and HIV.

[0101] Example 2 The effect of overexpression of the target sequences of the RNA virus in cells on the expression level of surrounding genes In this example, the effect of the overexpression of the target sequences of the RNA virus in 293T cells on the expression level of surrounding genes was detected. The steps are briefly described as follows:

[0102] 1. Preparation of lentivirus by liposome method: According to molecular cloning, SARS-CoV-2, SARS-CoV, MERS-CoVoverexpression plasmid, virus packaging plasmid psPAX2 and capsid plasmid pMD2.G-VSVG were transferred into 293T cells, and the supernatant was collected after 48 hr and 72 hr, respectively. The cell debris was filtered through a 0.45 μm filter to obtain the lentivirus stock solution.

[0103] 2. Cell infection: 200,000 cells to be infected (lentiviral stock solution) was spread in a 6 cm culture dish in advance, after the cells adhered on the second day, the first infection was carried out, and the infection was repeated again on the third day; on the fourth day, the cells were allowed to recover for one day without adding any stimulation; on the fifth day, drug screening was started to perform based on corresponding markers carried by the plasmid that reduce the potency of the drug.

[0104] 3. Real-time fluorescence quantitative PCR

Total RNA Extraction

[0105] 10^6-10^7 cells were prepared, resuspended in PBS, and then centrifuged to remove the supernatant, 1 ml of Trizol was added for lysis at room temperature for 5 min, then 0.2 ml of chloroform was added. The mixture was shaken in a vortex shaker for 15 s, and left to stand at room temperature for 2 min. The mixture was centrifuged in a centrifuge at 4° C. for 15 min at 13,300 rpm. The upper colorless water phase was transferred into another EP tube. An equal volume of isopropanol was added, mixed thoroughly in a vortex shaker, and the mixture was centrifuged in a centrifuge at 4° C. at 13,300 rpm for 10 min. The supernatant was discarded, and 1 ml of 75% ethanol prepared with DEPC water was added, turned upside down until the precipitate was suspended, and centrifuged in a centrifuge at 4° C. at 13.300 rpm for 5 min. The supernatant was aspirated with a pipette, during the period of drying at room temperature for 5-20 min, the morphology of the precipitation was observed. When just being transparent, 40-100 μl of DEPC water was used for dissolution according to the amount of precipitation. 1 μl was taken and the concentration and OD260/OD280 was measured on Nanodrop. The extracted RNA was stored in a refrigerator at -80° C.

Reverse Transcription Synthesis of cDNA

[0106] Takara (D2680A) reverse transcription PCR kit was used, the PCR reaction system and program were as follows:

Reverse transcription PCR system	Total volume 20 μl
5 × PrimeScript Buffer	4 μl
dNTP Mixture (2.5 mM each)	4 μl
Random 6 mers (100 μM)	
	1 μl
OligodT Primer (50 μM)	1 μl
PrimeScript Reverse Transcriptase (200 U/μl)	0.5 μl
RNase Inhibitor (40 U/μl)	0.5 μl
Total RNA	1 μg
RNase Freed H2O up to 20 μl	

Reverse transcription PCR program: 42° C. for 10 min, 95° C. for 2 min.

RT-qPCR

[0107] The expression of the gene of interest at the transcription level was detected using Takara real-time fluorescent quantitative PCR kit.

Real-time fluorescence quantitative PCR system	Total volume 10 μl
Sybr Green Mix	5 μl
Forward (10 μm)	1 μl
Reverse (10 um)	1 μl
cDNA	3 μl

[0108] Experimental results: After overexpression of the target sequence fragment, the expression level of the fragment was up-regulated tens of thousands of times (FIG. **2**). Specifically, the ACE2 gene, which is very related to the coronavirus, was activated after overexpression of the SARS-CoV-HIS, SARS-COV-2-HIS-3 and SARS-COV-2-HIS-4 fragments (FIG. **3**). The HAS**1** (FIG. **4**), HAS**2** (FIG. **5**) and HAS**3** (FIG. **6**) genes of the hyaluronic acid synthase family related to severe acute respiratory syndrome-related coronavirus 2 were also significantly activated by SARS-CoV-HIS, MERS-CoV-HIS, SARS-COV-2-HIS-3 and SARS-COV-2-HIS-4 fragments. Finally, it can be seen from the detection that the genes within 200 k around the SARS-COV-2-HIS-4 (FIG. **7**), SARS-COV-2-HIS-3 (FIG. **8**), SARS-COV-2-HIS-1 (FIG. **9**) and SARS-COV-2-HIS-5 (FIG. **10**) fragments were all significantly activated. The same results were obtained for the fragment SARS-CoV-2-HIS-6, which was not completely complementary (FIG. **11**). The specific genes comprised: FBXO**15**, MYL**9**, KALRN, ATP**8**B**1**, C**5**AR**1**, EPAS**1**, etc. The same results were also obtained for SARS-COV-HIS-2 (FIG. **12**) and MERS-COV-HIS-2 (FIG. **13**).

[0109] Specifically, the expression of the gene IGF**2**R around the target fragment of SARS virus was increased, and the expression of the gene IGF**2**R around the target fragment of MERS virus was increased. In addition, zika virus (FIG. **14**), ebola virus (FIG. **15**), and HIV-2 (FIG. **16**) were also detected in this example, and the results were also the same, specifically: after overexpression of the target fragment of zika virus in 293T cells, the expression of surrounding 16 genes such as CNMD and VPS**36** was increased; after overexpression of the target fragment of ebola virus in 293T cells, the expression of surrounding 15 genes such as VGLL**4** and TAMM**41** was all increased; after overexpression of HIV target fragment in 293T cells, the expression of surrounding genes BMP**5**, MMP**1** and ADCYAP**1** was increased; after overexpression of HIV2 target fragment in 293T cells, the expression of surrounding 8 genes such as LAPTM**4**A and LRRC**14**B was increased.

[0110] The above results prove that the constructed vector plays a certain function in the expression of miRNA related to SARS-CoV-2, and provides a research basis for subsequent research.

Example 3 - Inhibitory Effect of miRNA Inhibitor (antagomiR) or Antisense Sequence For the Target of the RNA Virus on Activated Target Genes

[0111] This example verifies the inhibitory effect of the inhibitor antagomir for the target of the RNA virus on activated target genes, and comprises the following steps:

[0112] step one: preparation of the inhibitor antagomir for the viral target: cholesterol modification and four phosphorothioate backbone modifications were made at the 3′ end of the reverse complementary sequence of the target sequence of the RNA virus, two phosphorothioate backbone modifications were made at the 5′ end, and methoxy modification was made on the whole chain to obtain the corresponding inhibitor antagomir for the target of the virus.

[0113] step two: the virus stock solution was prepared by the method of example 2, and the cells were infected with the virus stock solution. The infected cells were divided into two groups: an experimental group and a control group, wherein the experimental group was: 10 μM of virus-infected cell solution added with corresponding inhibitor for the viral target; the control group was: 10 μM of virus-infected cell solution. After 48 hours, the cell solution of the experimental group and the control group were tested according to the method of real-time fluorescent quantitative PCR in example 4.

[0114] The results of the test were shown in FIGS. **18-21**. The inhibitor for the viral target can specifically inhibit the replication of the target sequence, and the antagomir can target the target sequence well, so that the surrounding genes activated by SARS-CoV-HIS-2 (FIG. **17**), MERS-CoV -HIS-2 (FIG. **18**), SARS-CoV-2-HIS-4 (FIG. **19**) and SARS-CoV-2-HIS-3 (FIG. **20**) shown a significant tendency to decrease, further verifying the therapeutic value of targets in RNA virus.

[0115] This experiment further verified the inhibitory effect of the reverse complementary sequence of the target sequence of the RNA virus (comprising antisense DNA sequence and antisense RNA sequence), as well as cholesterol modification and four phosphorothioate backbone modifications made at the 3′ end of the target sequence of the RNA virus, two phosphorothioate backbone modifications made at the 5′ end, and methoxy modification made on the whole chain as an inhibitor on the activated target genes was verified. The test results were similar to that of the inhibitor antagomiR. It can be seen that the above-mentioned three inhibitors all had an inhibitory effect on activated target genes. Antisense RNA or antisense DNA of the target sequence of the RNA virus can be used to inhibit RNA virus nucleic acid and block important pathogenic pathways of RNA virus. The different modified or unmodified products of the antisense RNA or antisense DNA provided an important material basis for the treatment of RNA virus diseases. The detailed sequences of the antisense RNA or antisense DNA are shown in Table 2.

Example 4 - The Increase in Hyaluronic Acid Affected by the Target Can Be Reduced by the Hyaluronic Acid Inhibitor 4-MU

[0116] This example verifies that the increase in hyaluronic acid affected by the target can be reduced by the hyaluronic acid inhibitor 4-MU and comprises the following steps:

[0117] the lentivirus and infected cells were prepared by the method of example 2;

[0118] Replacement with the fresh medium was performed, 100 μM of hyaluronic acid inhibitor 4-MU was added in the experimental group, and DMSO (the solvent for 4-MU) was added in the control group. After 24 hours, the cell supernatant was collected and detected with hyaluronic acid ELISA kit (R&D, DY3614-05). The steps are briefly described as follows:

[0119] 1) Coating ELISA plate: The plate was coated with 100 μl/well of Capture Reagent overnight.

[0120] 2) Sealing: The Capture Reagent was removed by patting the plate. The plate was washed 3 times with 400 μl/wellof Wash buffer and patted to dryness. The plate was sealed with 100 μl/wel/welll of Dilute Reagent for 1 h.

[0121] 3) Washing the plate and incubating the sample: The plate was washed with 400 μl/well of Wash buffer 3 times, 100 μl/well of standard and serum to be tested were added (100 μl of the serum from patients with mild and severe COVID-19 was diluted with 200 μl of Dilute Reagent in the kit to a total volume of 300 μl, 3 replicate wells were made), and incubated at room temperature for 2 h.

[0122] 4) Washing the plate and incubation with the Detect Reagent. The plate was washed with 400 μl/well of Wash buffer 3 times, 100 μl/well of Detect Reagent was added and incubated at room temperature for 2 h.

[0123] 5) Washing the plate and incubation with HRP. The plate was washed with 400 μl/wellof Wash buffer 3 times, 100 μl/well of HRP was added and incubated at room temperature for 20 min.

[0124] 6) Washing the plate and incubation with the substrate. The plate was washed with 400 μl/well of Wash buffer 3 times, 100 μl/well of mixed solution of substrates A and B was added and incubated at room temperature for 20 min.

[0125] 7) Stopping color development. 50 μl/well of stop solution was added.

[0126] Absorbance was read at 450 nm within 15 min. The test results are shown in Table 4 and Table 5: After overexpression of the target sequence of the virus in cell lines 293T and MRC**5**, the hyaluronic acid content was significantly increased (Table 4). The hyaluronic acid produced due to overexpression of the target sequence can be reduced using hyaluronic acid inhibitor 4-MU (Table 5). This example proves that the target of the virus has scientific research value and 4-MU has the potential to become a therapeutic drug targeting the target and has a therapeutic value for complications related to the target of the RNA virus.

TABLE 4

Determination of hyaluronic acid content in 293T and MRC5 cells in which the target of the virus is overexpressed

		Hyaluronic acid (ng/ml)		
	293T	p value	MRC5	p value
CTRL	7.39±0.26	-	59.55±4.73	-
HIS-MERS-CoV-2	76.91±2.29	**	106.97±4.69	**
HlS-SARS-CoV-1-2	115.60 +18.10	**	116.84±1.52	**
HIS-SARS-CoV-2-3	62.66±7.14	**	72.40±8.75	ns
HlS-SARS-CoV-2-4	113.95 ±13.14	**	117.44±2.03	**

TABLE 5

Determination of the inhibitory ability of hyaluronic acid inhibitor on hyaluronic acid in the case of overexpression of the target of the virus

	Hyaluronic acid (ng/ml)		
	DMSO	4-MU (100 μM)	p value
CTRL	7.39±0.26	3.20±0.39	**
HIS-MERS-CoV-2	76.91±2.29	39.72±5.75	**
HIS-SARS-CoV-1-2	115.60±18.10	23.50±3.44	**
HIS-SARS-CoV-2-3	62.68±7.14	30.02±2.00	**
H IS-SARS-CoV-2-4	113.95±13.14	19.76±11.3	*

Example 5 - Detection of Blood Routine Index

[0127] The blood routine index was provided by the hospital, and the hyaluronic acid in the blood was detected using the hyaluronic acid ELISA kit (R&D, DY3614-05). Specifically, the HA content in the serum of a patient with severe COVID-19 was significantly increased compared with that in a patient with mild COVID-19 (Table 6). In addition, the number of lymphocytes in a patient with severe COVID-19 was significantly lower than that in a patient with mild COVID-19, suggesting that the number of the immune cells in a patient was decreased with the disease progressing to severe; furthermore, D-dimer is a fibrin degradation product, and the increase of D-dimer level indicates the existence of hypercoagulable state and secondary hyperfibrinolysis in the body. Therefore, the mass concentration of D-dimer has diagnostic significance for thrombotic diseases. The content of D-dimer in the serum of a patient with severe COVID-19 was significantly higher than that in a patient with mild COVID-19, indicating that the risk of coagulation in a patient was increased with the condition of COVID-19 progressing to severe, and also indicating that there was a certain feasibility of subsequent anticoagulation therapy.

TABLE 6

Hematological indicators of a patient with mild or severe COVID-19

	HA (ng/ml)	LYMPH# (10^9/L)	CRP (mg/L)	D-D (ug/ml)
Mild (n=37)	3.77±2.86	1.79±0.50	0.77±0.68	0.28±0.12
Severe (n=22)	35.41 ±28.88***	1.40±0.43**	8.49±9.66***	0.49±0.36*

[0128] The above results provide a basis for the changes in hematological indicators caused by the target sequences of the RNA virus to become clinical diagnosis, and reflects the clinical diagnostic value of the targets of the RNA virus. Moreover, the targets have the potential to become a vaccine. In addition, in the process of preparing vaccines, common attenuated live vaccines still have certain risks that need to be further optimized. The pathogenic risk of a vaccine will be greatly reduced by knockout of the targets.

[0129] The specific examples of the present invention are described in detail above and are only for illustration, and the present invention is not limited to the specific examples described above. For a person skilled in the art, any equivalent modifications and alternatives made to the present invention are also within the scope of the present invention. Therefore, all equivalent changes and modifications made without departing from the spirit and scope of the present invention should fall within the scope of the present invention.

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<400> SEQUENCE: 16

agauccugug acuucuggac uuuu                                             24


<210> SEQ ID NO 17
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 17

aaauauuauu uuuaaaauuu acuu                                             24


<210> SEQ ID NO 18
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 18

acuuuuuaaa agaaaagggg gga                                              23


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<212> TYPE: RNA
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<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 19
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<210> SEQ ID NO 20
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 20

aaaugaacaa guagauaaau uag                                               23


<210> SEQ ID NO 21
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 21

aaauuauggu accaguuaga gaaa                                              24


<210> SEQ ID NO 22
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 22

gaaagaaaaa auauaaauua aaa                                               23


<210> SEQ ID NO 23
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 23

auuuaucaag agccauuuaa aaa                                               23


<210> SEQ ID NO 24
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 24

uaaaacaggg accaaaagaa ccgu                                              24


<210> SEQ ID NO 25
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence
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agaaucagau aaguagaauu aga                                              23


<210> SEQ ID NO 26
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<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 26

aggcagagga agaugaggcc aac                                              23


<210> SEQ ID NO 27
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 27

uaucaaaaaa uuaagaaaag guua                                             24


<210> SEQ ID NO 28
<211> LENGTH: 28
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 28

ggaucagugg agaaagugag gaggauga                                         28


<210> SEQ ID NO 29
<211> LENGTH: 23
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 29

augagagauc uuggggugg gac                                               23


<210> SEQ ID NO 30
<211> LENGTH: 23
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 30

gaaaaacuca agaugaaagg aau                                              23


<210> SEQ ID NO 31
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 31

auugauuggc uuaaggagaa aaua                                              24


<210> SEQ ID NO 32
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 32

aauuguuuac cuauuuauug guuuugug                                          28


<210> SEQ ID NO 33
<211> LENGTH: 22
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 33

cugugcugaa ccaggaccag ga                                                22


<210> SEQ ID NO 34
<211> LENGTH: 22
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 34

agaugaagca gucaccaacc gc                                                22


<210> SEQ ID NO 35
<211> LENGTH: 27
<212> TYPE: RNA
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<400> SEQUENCE: 35

auuagauuuc aacacaggug cuacauc                                           27


<210> SEQ ID NO 36
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 36

uuggaauguu uugcuccucu uua                                               23


<210> SEQ ID NO 37
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 37

gaaauuuuau uauuuuguuc agu                                              23


<210> SEQ ID NO 38
<211> LENGTH: 23
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 38

uuagcuagau uuacagauuu gga                                              23


<210> SEQ ID NO 39
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 39

aacaagagca ggccagugug gugg                                             24


<210> SEQ ID NO 40
<211> LENGTH: 24
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 40

uugaggaaaa gggaacccug uaca                                             24


<210> SEQ ID NO 41
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 41

ccaggcacug ggaagucagu ggca                                             24


<210> SEQ ID NO 42
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 42

aauuaggagu gauaccuuca cuaa                                             24
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 43

ugagaaaaag gccacugucc uuua                                              24


<210> SEQ ID NO 44
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 44

acaaauugga gaaauaguga aaa                                               23


<210> SEQ ID NO 45
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 45

gaagcagaga gaaaguagag aag                                               23


<210> SEQ ID NO 46
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 46

ucaaaaggag agaacagaug cugg                                              24


<210> SEQ ID NO 47
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 47

caaaagaagg cauuaaaaga gga                                               23


<210> SEQ ID NO 48
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 48
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gagauggacu uugauuucug uga 23

<210> SEQ ID NO 49
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 49

ggaaauccag ggagguuuug gaa 23

<210> SEQ ID NO 50
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 50

aaaggaagaa auugaaaccc aga 23

<210> SEQ ID NO 51
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 51

guggcaggcc cauuacacca cca 23

<210> SEQ ID NO 52
<211> LENGTH: 28
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 52

aguuuaaauu uauauccaaa auaaauuu 28

<210> SEQ ID NO 53
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 53

aagaaaaaga uaaauagaac acaaagaauu gacaaaauuu 40

<210> SEQ ID NO 54
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

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<400> SEQUENCE: 54

ucuaagcgaa guaacaacaa gagu                                              24


<210> SEQ ID NO 55
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 55

aacagaaaga agcauuauua caucaggcuu cu                                     32


<210> SEQ ID NO 56
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 56

ugauuuauau uuacugguau aaaauagu                                          28


<210> SEQ ID NO 57
<211> LENGTH: 32
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 57

aacaaacaaa ccagagacac uaaggaaaug ca                                     32


<210> SEQ ID NO 58
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 58

auacaaucaa auugaauggc au                                                22


<210> SEQ ID NO 59
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 59

agaugacaau ugugaaauua aa                                                22


<210> SEQ ID NO 60
<211> LENGTH: 29
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 60

guuauauaug ggaaaugaug gaauuaaca                                    29


<210> SEQ ID NO 61
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 61

aaaaaacuaa gugauucaac a                                            21


<210> SEQ ID NO 62
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 62

aaauacaaaa aauauacuga auacaa                                       26


<210> SEQ ID NO 63
<211> LENGTH: 37
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 63

uuuacauucc uggucaacua ugaaaugaaa cuauugc                           37


<210> SEQ ID NO 64
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 64

cuacaaaaaa augcuaaaag aa                                           22


<210> SEQ ID NO 65
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 65

augcugaaca acucaaagaa aa                                           22


<210> SEQ ID NO 66
<211> LENGTH: 22
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 66

aggaaaguga aaagauggca aa                                                22


<210> SEQ ID NO 67
<211> LENGTH: 29
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 67

aaugaggaaa gugaaaagau ggcaaaaga                                         29


<210> SEQ ID NO 68
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 68

caagaaaaaa gauaguauca u                                                 21


<210> SEQ ID NO 69
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 69

ccauagaaac auuugauaac aaugaagaa                                         29


<210> SEQ ID NO 70
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 70

aaaguauaua uuauguuaca aca                                               23


<210> SEQ ID NO 71
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 71

augauaacaa caauaaucuc uuu                                               23
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<210> SEQ ID NO 72
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 72

acuaauacac augauaacaa                                                   20


<210> SEQ ID NO 73
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 73

ugauaacaac aauaaucucu uugcua                                            26


<210> SEQ ID NO 74
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 74

gaaaaggaaa agaagauuuc uug                                               23


<210> SEQ ID NO 75
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 75

aauguacagc auccaauaaa aa                                                22


<210> SEQ ID NO 76
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 76

uaauuauuuu gaauggccac cccaug                                            26


<210> SEQ ID NO 77
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 77
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aauuauuuug aauggccacc c                                                21


<210> SEQ ID NO 78
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 78

ucuauaaaua auauaacuaa a                                                21


<210> SEQ ID NO 79
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 79

uaaauauaga uaaaauauac auua                                             24


<210> SEQ ID NO 80
<211> LENGTH: 29
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 80

aaauguuugu uuaauuacau ggauuagua                                        29


<210> SEQ ID NO 81
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 81

augguuaaua cauugguuua auuuaua                                          27


<210> SEQ ID NO 82
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 82

aacuauauua aaaacuuaug uau                                              23


<210> SEQ ID NO 83
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence
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<400> SEQUENCE: 83

uauagaacau gaaaaauuaa aauuuuc                                           27


<210> SEQ ID NO 84
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 84

uagacaauau aacuauauua aaa                                               23


<210> SEQ ID NO 85
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 85

aauguuacca uuguuaucua aua                                               23


<210> SEQ ID NO 86
<211> LENGTH: 28
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 86

agguaaauua augagagaga auggaguu                                          28


<210> SEQ ID NO 87
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 87

uauuuuaaaa ggcagauaau uaga                                              24


<210> SEQ ID NO 88
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 88

ggaacuuggu gcauuuuuuu cua                                               23


<210> SEQ ID NO 89
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 89

auuuuucuug auugcuuuuc aa                                               22


<210> SEQ ID NO 90
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 90

uauucugaaa augguauauu uaa                                              23


<210> SEQ ID NO 91
<211> LENGTH: 23
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 91

agccuauuuu cauugaugcc uga                                              23


<210> SEQ ID NO 92
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 92

ucaacaaaua uuuacaggca aaa                                              23


<210> SEQ ID NO 93
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 93

uuagaaaaau ggaaaaguau aga                                              23


<210> SEQ ID NO 94
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 94

aagagcucaa caaauauuua cag                                              23


<210> SEQ ID NO 95
<211> LENGTH: 28
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 95

ucuaaauauu cagaaugcac uagagaaa                                        28


<210> SEQ ID NO 96
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 96

ugauggggu ugacggaguu ggggagu                                          27


<210> SEQ ID NO 97
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 97

ggggauugga aaggcucucu gug                                             23


<210> SEQ ID NO 98
<211> LENGTH: 25
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 98

aaauggagca gaaagaacac ucagg                                           25


<210> SEQ ID NO 99
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 99

uggcucgaag agcauggaga ggaa                                            24


<210> SEQ ID NO 100
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 100

aggaagggga uugagagacu cac                                             23
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<210> SEQ ID NO 101
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 101

aaaauagacu ggagauggcc auguggagaa gc                                32


<210> SEQ ID NO 102
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 102

cagcgcaggg gaagaguggg caggcag                                      27


<210> SEQ ID NO 103
<211> LENGTH: 32
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 103

aauaagaaaa gcaacauugu gauuuuuaau ua                                32


<210> SEQ ID NO 104
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 104

uaaaaaaagu caaauuuaug auua                                         24


<210> SEQ ID NO 105
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 105

cuuuggcauu ucagugauuc agcaaaa                                      27


<210> SEQ ID NO 106
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 106
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aaaugugcuc cccuuuccug ga 22

<210> SEQ ID NO 107
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 107

uuuuaaagga guggugaaga agaaaga 27

<210> SEQ ID NO 108
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 108

aaauaauaua aaugcauuca acu 23

<210> SEQ ID NO 109
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 109

ggcaggugug guugcucaag cuguaa 26

<210> SEQ ID NO 110
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 110

uauaacauuu uccugcuucc aa 22

<210> SEQ ID NO 111
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 111

ucauuggaag auggagcucu uu 22

<210> SEQ ID NO 112
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

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<400> SEQUENCE: 112

cagcuuacuc uuccucagag uucuuu                                          26


<210> SEQ ID NO 113
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 113

uuuaugaauu cuacagaaau aaugauaaug                                      30


<210> SEQ ID NO 114
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 114

aaagauuaug gaaacuuuuc ug                                              22


<210> SEQ ID NO 115
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 115

uugcuguuuu uccaaacacu aga                                             23


<210> SEQ ID NO 116
<211> LENGTH: 34
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 116

gucaauccaa auauuggaag aagcagaagu uaau                                 34


<210> SEQ ID NO 117
<211> LENGTH: 29
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 117

auguggagac auuccagcac agaggaaac                                       29


<210> SEQ ID NO 118
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 118

ucaggcucaa gugaucucuc auuuca                                            26


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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 119

uuauauugaa guuuaugaag uug                                               23


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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 120

agauauagga augugucuga aa                                                22


<210> SEQ ID NO 121
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<212> TYPE: RNA
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<220> FEATURE:
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aaaagucaag aaaauuaaau uuaua                                             25


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uaugccugau aauuuuucau ugg                                               23


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<212> TYPE: RNA
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<400> SEQUENCE: 123

auaaaggaaa agucaagaaa auu                                               23


<210> SEQ ID NO 124
<211> LENGTH: 22
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<220> FEATURE:
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<400> SEQUENCE: 124

agagagagag aaaagaaaau ug                                              22


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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 125

uaugccugau aauuuuucau ug                                              22


<210> SEQ ID NO 126
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 126

cuguguuuuc uccuagaaug uca                                             23


<210> SEQ ID NO 127
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 127

aaagacagga uuucauuauu ugua                                            24


<210> SEQ ID NO 128
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<212> TYPE: RNA
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<400> SEQUENCE: 128

uggaugugag aaauacuugg ga                                              22


<210> SEQ ID NO 129
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<212> TYPE: RNA
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<400> SEQUENCE: 129

aaaagacagg auuucauuau uu                                              22
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<400> SEQUENCE: 130

aaaagacagg auuucauuau uuguau                                          26


<210> SEQ ID NO 131
<211> LENGTH: 22
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 131

gacaggauuu cauuauuugu au                                              22


<210> SEQ ID NO 132
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 132

aguucucuuu ugacauuuug uuc                                             23


<210> SEQ ID NO 133
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 133

ugacauuuug uucuuucuuu g                                               21


<210> SEQ ID NO 134
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 134

gaaaauguug uccaacaauc caaucaa                                         27


<210> SEQ ID NO 135
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 135
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ggaagaaaag acauuaaacu aauu 24

<210> SEQ ID NO 136
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 136

uaaucuucua uaagucuagu aaa 23

<210> SEQ ID NO 137
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 137

caggaauccu uguagugaug ggauugu 27

<210> SEQ ID NO 138
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 138

uauauucaau ggcaaaagaa aacaaau 27

<210> SEQ ID NO 139
<211> LENGTH: 28
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 139

aaugccuuaa ucucagauaa uuuguuaa 28

<210> SEQ ID NO 140
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 140

uaauuuguua augaagaaua aaauuaa 27

<210> SEQ ID NO 141
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 141

aacaaguuuc uccuuaucau aaa 23

<210> SEQ ID NO 142
<211> LENGTH: 29
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 142

cauaguaucu cuuauaaucc uuuucauuu 29

<210> SEQ ID NO 143
<211> LENGTH: 28
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 143

auaguaucuc uuauaauccu uuucauuu 28

<210> SEQ ID NO 144
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 144

uacaaacaug ggcaauucaa aauc 24

<210> SEQ ID NO 145
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 145

gcucuucuuu ccuuaacaaa ugu 23

<210> SEQ ID NO 146
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 146

uguuaaacac uuucuuuccu uuu 23

<210> SEQ ID NO 147
<211> LENGTH: 23
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 147

auaguaucuc uuauaauccu uuu                                               23


<210> SEQ ID NO 148
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 148

acaacugaaa caaugcaagg aau                                               23


<210> SEQ ID NO 149
<211> LENGTH: 23
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 149

guucaagggc caauuauauc aca                                               23


<210> SEQ ID NO 150
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 150

uauaaaauuu ucucaggucu au                                                22


<210> SEQ ID NO 151
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 151

agaaauucag gaaaauggaa aaa                                               23


<210> SEQ ID NO 152
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 152

cacaaagcuc aagcacguau ugu                                               23


<210> SEQ ID NO 153
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 153

cuuguuuucu uucccuuucu uucug                                          25


<210> SEQ ID NO 154
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 154

uuucuuuccc uuucuuucug cuuucu                                         26


<210> SEQ ID NO 155
<211> LENGTH: 29
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 155

uuuucuuucc cuuucuuucu gcuuucucu                                      29


<210> SEQ ID NO 156
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 156

uuucuuuccc uuucuuucug cuu                                            23


<210> SEQ ID NO 157
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 157

uuucuuuccc uuucuuucug cuuucu                                         26


<210> SEQ ID NO 158
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 158

auauggaugu agauuucauu ug                                             22
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<210> SEQ ID NO 159
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 159

uuuucuuucc cuuucuuucu gcuuucu                                          27


<210> SEQ ID NO 160
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 160

acaucuuuac aauguggaua uuucuuc                                          27


<210> SEQ ID NO 161
<211> LENGTH: 28
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 161

uucauacauu cuaaacuuaa uuccagau                                         28


<210> SEQ ID NO 162
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 162

gacuacaaga gaaggauggc aga                                              23


<210> SEQ ID NO 163
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 163

aauggcaguu augaauauau ua                                               22


<210> SEQ ID NO 164
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 164
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aagguuguau uuuauuauuu aa 22

<210> SEQ ID NO 165
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 165

ccuuuuuccu uuucaucacu uuuuuu 26

<210> SEQ ID NO 166
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 166

caggaaaaaa auggauacua aa 22

<210> SEQ ID NO 167
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 167

auuauuuuau aaucauuauc uaauua 26

<210> SEQ ID NO 168
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 168

uauauauaug caaguagcau auauaua 27

<210> SEQ ID NO 169
<211> LENGTH: 25
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 169

uguuagauuu cuugucauuu uuucc 25

<210> SEQ ID NO 170
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

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<400> SEQUENCE: 170

ccacagcaac augguuucag uau                                               23


<210> SEQ ID NO 171
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 171

cuuguuaagu acuugauauc ugu                                               23


<210> SEQ ID NO 172
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 172

auucucuuau uaugaauaaa gca                                               23


<210> SEQ ID NO 173
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 173

agagagaaag aaagagaauu ggggagu                                           27


<210> SEQ ID NO 174
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 174

auauggaugu agauuucauu ug                                                22


<210> SEQ ID NO 175
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 175

aacaucuuau uuccuucuuu uc                                                22


<210> SEQ ID NO 176
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 176

uuuuuagccc uugcaaagaa cu                                              22


<210> SEQ ID NO 177
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 177

cuucauuaag uguuuuuauc ggaaguca                                        28


<210> SEQ ID NO 178
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 178

ugcccugacu ucacaggcca uuu                                             23


<210> SEQ ID NO 179
<211> LENGTH: 31
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 179

auuaucuuaa gaaagauuaa agaagaauuu g                                    31


<210> SEQ ID NO 180
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 180

ucaaagcaaa auagguucag agc                                             23


<210> SEQ ID NO 181
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 181

aacuuuuuau ugauccagug cuca                                            24


<210> SEQ ID NO 182
<211> LENGTH: 23
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 182

agauaucuuu caaaaaauuu caa                                              23


<210> SEQ ID NO 183
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 183

augcauacaa caaugggaau gucauuu                                          27


<210> SEQ ID NO 184
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 184

auuguuuaua uuuauuuuca uuu                                              23


<210> SEQ ID NO 185
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 185

caacauaaaa aaucaaccau auu                                              23


<210> SEQ ID NO 186
<211> LENGTH: 29
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 186

uccucuuuuc uuuuccuuuc uccuucuuu                                        29


<210> SEQ ID NO 187
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 187

cagaaaagca guaugagaag ga                                               22
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<210> SEQ ID NO 188
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 188

uugccugggg aaaggaggca gu                                              22


<210> SEQ ID NO 189
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 189

cagaaaagca guaugagaag ga                                              22


<210> SEQ ID NO 190
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 190

ucuuuucuuu uccuuucucc uucuuu                                          26


<210> SEQ ID NO 191
<211> LENGTH: 30
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 191

guccucuuuu cuuuuccuuu cuccuucuuu                                      30


<210> SEQ ID NO 192
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 192

cuuuucuuuu ccuuucuccu uc                                              22


<210> SEQ ID NO 193
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 193
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cucuuuucuu uuccuuucuc cuucuu                                          26


<210> SEQ ID NO 194
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 194

uuaauaagaa uacagauuua uu                                              22


<210> SEQ ID NO 195
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 195

ucucugaguu agaaaaugag aaagu                                           25


<210> SEQ ID NO 196
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 196

cuuugcauua aaaaaugugu uuga                                            24


<210> SEQ ID NO 197
<211> LENGTH: 31
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 197

uuuuauaugu cuagaaaacu uagacacuau a                                    31


<210> SEQ ID NO 198
<211> LENGTH: 25
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 198

cuacaggaug uagauuuuga aaaua                                           25


<210> SEQ ID NO 199
<211> LENGTH: 31
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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ucuuuguauu cuggcuuucc uucuuugguu g                                   31


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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 200

agaagacaca aaaaaaugug uuaacacaaa ac                                  32


<210> SEQ ID NO 201
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 201

ucaguguuuu cugacuccaa aguu                                           24


<210> SEQ ID NO 202
<211> LENGTH: 29
<212> TYPE: RNA
<213> ORGANISM: Vitex agnus-castus

<400> SEQUENCE: 202

uaccaagaaa augaagaagg cucuucuga                                      29


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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 203

uuuacuugcu uauguaaccu uauuuu                                         26


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uuucucuauu uucucuuguu uuaaac                                         26


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<220> FEATURE:
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aagaugacua ucuaaaaugu cagg                                             24


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auucacugcc uucuucccuc uca                                              23


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<212> TYPE: RNA
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<400> SEQUENCE: 207

cugucugcua accaguauga aca                                              23


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agaaaguucu aucaaguuuu uuu                                              23


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<212> TYPE: RNA
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<400> SEQUENCE: 209

uuucaaauuc cuucucagaa uuc                                              23


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<400> SEQUENCE: 210

auuuuguaca gaagguuuuc auaa                                             24


<210> SEQ ID NO 211
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<220> FEATURE:
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<400> SEQUENCE: 211

auugauuaga aauucaacuu ggaaaaauca aug                                    33


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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 212

ggaugucuuu gucuuucuuu uucuuug                                           27


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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 213

acaccaaagg gaaacucacu gacagaaaac                                        30


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gacacagaug aagaaacuuc cuuu                                              24


<210> SEQ ID NO 215
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 215

uacaacccaa gagagcuuaa ac                                                22


<210> SEQ ID NO 216
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<400> SEQUENCE: 216

aaagaaugaa guaaagguca gca                                               23


<210> SEQ ID NO 217
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<400> SEQUENCE: 217

gugcuauuga ucagacuaau ua                                                22


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<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 218

gcuggacugu ggugacagcc uc                                                22


<210> SEQ ID NO 219
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 219

caaccucugc acaaaaugag cu                                                22


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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 220

acaauggagc augcaaggaa gca                                               23


<210> SEQ ID NO 221
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 221

uagcagguag uauccaagac agagac                                            26


<210> SEQ ID NO 222
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 222

aaaaugcuga ggauaugggc aa                                                22
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<223> OTHER INFORMATION: Fragment coding sequence

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caauaaccaa agagaaaaaa gaa                                              23


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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 224

aaucauggaa guuguuuucc cca                                              23


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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 225

aagcaaccag gagauugguu ca                                               22


<210> SEQ ID NO 226
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 226

augcaacuga gaucagagca uc                                               22


<210> SEQ ID NO 227
<211> LENGTH: 22
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 227

ccagaggaca agagcucuug uu                                               22


<210> SEQ ID NO 228
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gaggacgaga uggguggauc aaga 24

<210> SEQ ID NO 229
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 229

gaggacgaga uggguggauc aagagguc 28

<210> SEQ ID NO 230
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 230

uuggcucauu cucuguuuuu uuuguuuuuu uu 32

<210> SEQ ID NO 231
<211> LENGTH: 28
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 231

gaggacgaga uggguggauc aagagguc 28

<210> SEQ ID NO 232
<211> LENGTH: 28
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 232

cucauucucu guuuuuuuug uuuuuuuu 28

<210> SEQ ID NO 233
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 233

cuuuauucua aaauauuuuu aaau 24

<210> SEQ ID NO 234
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

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<400> SEQUENCE: 234

augagcccaa gacuucuuuu gau                                         23


<210> SEQ ID NO 235
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 235

aagaaacugu gauuuuuaau acuua                                       25


<210> SEQ ID NO 236
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 236

aagaaugaua aagcaaagaa aa                                          22


<210> SEQ ID NO 237
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 237

uacuuuuaaa gaugcaugcu uucauu                                      26


<210> SEQ ID NO 238
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 238

uuuaaaaaau gauaagaaua aa                                          22


<210> SEQ ID NO 239
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 239

agaaugauaa agcaaagaaa auguag                                      26


<210> SEQ ID NO 240
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 240

uacugaucuc caacucagaa ga                                              22


<210> SEQ ID NO 241
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 241

aaaauuugaa agaaugauaa agcaaa                                          26


<210> SEQ ID NO 242
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 242

aaaaaugaau gaaaauaugc auucucuuca aaa                                  33


<210> SEQ ID NO 243
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 243

aaagcaagaa aaaugaauga aaa                                             23


<210> SEQ ID NO 244
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 244

caagaaaaau gaaugaaaau au                                              22


<210> SEQ ID NO 245
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 245

aggagaaauc aaaacaaaac caua                                            24


<210> SEQ ID NO 246
<211> LENGTH: 21
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 246

gcauucaaua aauacaugcu g                                             21


<210> SEQ ID NO 247
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 247

auguaagaac uguaaauaua a                                             21


<210> SEQ ID NO 248
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 248

aaaacaaaac cauaaaagua g                                             21


<210> SEQ ID NO 249
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 249

aaaggagaaa ucaaaacaaa accauaaaa                                     29


<210> SEQ ID NO 250
<211> LENGTH: 29
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 250

uagggagcuc cccacucccg uuuugugac                                     29


<210> SEQ ID NO 251
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 251

uauaucaaaa gaaaaugaaa ucaa                                          24
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 252

gauuaaauuu auaucaaaag aaaaugaa                                        28


<210> SEQ ID NO 253
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 253

uauaucaaaa gaaaaugaaa ucaaua                                          26


<210> SEQ ID NO 254
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 254

aaagaaaaug aaaucaauag uugagga                                         27


<210> SEQ ID NO 255
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 255

uauaucaaaa gaaaaugaaa ucaauag                                         27


<210> SEQ ID NO 256
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 256

augaccaaau guauagauug aga                                             23


<210> SEQ ID NO 257
<211> LENGTH: 34
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 257
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uauaucaaaa gaaaaugaaa ucaauaguug agga                                   34


<210> SEQ ID NO 258
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 258

uauaucaaaa gaaaaugaaa ucaaua                                            26


<210> SEQ ID NO 259
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 259

uugaaauaag aagauuagau auuuuuaauu                                        30


<210> SEQ ID NO 260
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 260

ugauaucauu uucaauuaca ua                                                22


<210> SEQ ID NO 261
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 261

aagaaaaaga agauagcaag aa                                                22


<210> SEQ ID NO 262
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 262

agcuaaaguu ugguaggaaa acaa                                              24


<210> SEQ ID NO 263
<211> LENGTH: 31
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence
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<400> SEQUENCE: 263

aaaucaagua aaauaacaau aaaugacaua c                                    31


<210> SEQ ID NO 264
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 264

cauuaaauuu auacaaacaa acacaaa                                         27


<210> SEQ ID NO 265
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 265

agcuaaaguu ugguaggaaa acaa                                            24


<210> SEQ ID NO 266
<211> LENGTH: 25
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 266

gaaauauacc auauaaauau gaugu                                           25


<210> SEQ ID NO 267
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 267

aaauaagauc agaauuuuau uua                                             23


<210> SEQ ID NO 268
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 268

agaauuauau uaauacagua ua                                              22


<210> SEQ ID NO 269
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 269

agcauuaaaa cauuagaaau auuaaauaag                                        30


<210> SEQ ID NO 270
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 270

agaauuauau uaauacagua uauagu                                            26


<210> SEQ ID NO 271
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 271

gaagaauuau ucacauuaau aa                                                22


<210> SEQ ID NO 272
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 272

gaagaacaaa cuauuaauaa uu                                                22


<210> SEQ ID NO 273
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 273

uaagaucaga auuuuauuua uuacua                                            26


<210> SEQ ID NO 274
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 274

uaaaccaaac auuuuuccuu au                                                22


<210> SEQ ID NO 275
<211> LENGTH: 22
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 275

auuuuaaaac acuuaaaaau uu                                              22


<210> SEQ ID NO 276
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 276

caauauuucu gcuguucaau ucaaugg                                         27


<210> SEQ ID NO 277
<211> LENGTH: 33
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 277

uuuuuugggu uuuguuugug uugauacuuu gag                                  33


<210> SEQ ID NO 278
<211> LENGTH: 28
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 278

gcaaauuuau cuuaaauuca aguacaua                                        28


<210> SEQ ID NO 279
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 279

uaacagacuu ggaaaaauac aauu                                            24


<210> SEQ ID NO 280
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 280

auuaccuuca aaaaucuaga acuuuauuaa uucucag                              37
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<210> SEQ ID NO 281
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 281

aaaauuaaaa acaaaaauga aagg 24

<210> SEQ ID NO 282
<211> LENGTH: 28
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 282

cuuauuuuau gucuucuuug uuguuuuu 28

<210> SEQ ID NO 283
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 283

auuauuaaca acuuauuuuu auuuaaucuu uua 33

<210> SEQ ID NO 284
<211> LENGTH: 28
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 284

auaaagaaga auauuaacau ugacauua 28

<210> SEQ ID NO 285
<211> LENGTH: 28
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 285

uuaugaaugu uuuaucauga uuaaagau 28

<210> SEQ ID NO 286
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 286

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cccagcacag agaugucauu ga                                                22


<210> SEQ ID NO 287
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 287

agugagaaau gaugauguug aucaga                                            26


<210> SEQ ID NO 288
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 288

uucuaaggaa agcaaccaga ag                                                22


<210> SEQ ID NO 289
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 289

ugagcaagaa gaaauccuac au                                                22


<210> SEQ ID NO 290
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 290

ggaaugagaa gaaagcuaaa uu                                                22


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<400> SEQUENCE: 291

uuagaaaugu cuuaagcauu gc                                                22


<210> SEQ ID NO 292
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 292

caggacauug aaaaugaaga gaag 24

<210> SEQ ID NO 293
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<212> TYPE: RNA
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<400> SEQUENCE: 293

aagagaaaga ccugaccaaa ga 22

<210> SEQ ID NO 294
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 294

acuaagucau auaaaaauac aagaaaaa 28

<210> SEQ ID NO 295
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 295

aacaauuuga guugauagac aaugaau 27

<210> SEQ ID NO 296
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 296

aucauguuuc auacuucuag ccauug 26

<210> SEQ ID NO 297
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 297

gaaacauacu aagaacacag gaa 23

<210> SEQ ID NO 298
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence

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<220> FEATURE:
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<400> SEQUENCE: 298

uuucaccauu accuucucuu cc 22

<210> SEQ ID NO 299
<211> LENGTH: 27
<212> TYPE: RNA
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<400> SEQUENCE: 299

aggaagcaaa auuaaacaga gaagaaa 27

<210> SEQ ID NO 300
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<212> TYPE: RNA
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<400> SEQUENCE: 300

uggaaaauga aagaacuuug ga 22

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<212> TYPE: RNA
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<400> SEQUENCE: 301

aaaacaacac uuggguaaau cagaca 26

<210> SEQ ID NO 302
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<212> TYPE: RNA
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<400> SEQUENCE: 302

gcugcuggac agucaguggu uu 22

<210> SEQ ID NO 303
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 303

ggaucaagaa agaagaguuc ucugaga 27

<210> SEQ ID NO 304
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<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 304

ggggagacac acaaauucag ac                                            22


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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 305

accaaaugaa aacccagcuc acaagaguca                                    30


<210> SEQ ID NO 306
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 306

aaaugagaau guggaaacca ug                                            22


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<220> FEATURE:
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agaaauaagg agaguuuggc gc                                            22


<210> SEQ ID NO 308
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 308

agaagaguag acggaaagug ga                                            22


<210> SEQ ID NO 309
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agaagaguag acggaaagug ga                                            22
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<220> FEATURE:
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<400> SEQUENCE: 310

gaagagagca gggcaagaau caaaacuagg cu 32

<210> SEQ ID NO 311
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 311

agggcaagcu uucccaaaug uc 22

<210> SEQ ID NO 312
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<400> SEQUENCE: 312

ggacaugauu ccagagagga augaacaagg acaa 34

<210> SEQ ID NO 313
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 313

ggaaauugug aaaauucaau gg 22

<210> SEQ ID NO 314
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 314

gagucuacau ucucaguuuu guc 23

<210> SEQ ID NO 315
<211> LENGTH: 22
<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 315

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gagacagaca guaaaggaaa au                                              22


<210> SEQ ID NO 316
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 316

ugaagaaaaa cuaaagaaaa aa                                              22


<210> SEQ ID NO 317
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 317

ccagacagca gacuggaagg ca                                              22


<210> SEQ ID NO 318
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 318

aacaggaaau cauauugaau uugu                                            24


<210> SEQ ID NO 319
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 319

aguaugcaug gaaagauuuu cuuaaug                                         27


<210> SEQ ID NO 320
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<212> TYPE: RNA
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<220> FEATURE:
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cagaguuuga auuuuaugau cag                                             23


<210> SEQ ID NO 321
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<400> SEQUENCE: 321

ugaggguaac auuuaauuuu ggg                                              23


<210> SEQ ID NO 322
<211> LENGTH: 27
<212> TYPE: RNA
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<400> SEQUENCE: 322

uuuuuucuuu uugagaaagg gcuucau                                          27


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<220> FEATURE:
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<400> SEQUENCE: 323

agaaaacaac agguguugau gag                                              23


<210> SEQ ID NO 324
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<212> TYPE: RNA
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<400> SEQUENCE: 324

uuuuuucuuu uugagaaagg gcu                                              23


<210> SEQ ID NO 325
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 325

aaaugaaaga uuuccagaaa uug                                              23


<210> SEQ ID NO 326
<211> LENGTH: 30
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 326

acaacagaua caacaaaugc uggugagaau                                       30


<210> SEQ ID NO 327
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<212> TYPE: RNA
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<400> SEQUENCE: 327

agugauucau gcugaaauac agu                                               23


<210> SEQ ID NO 328
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 328

augagagauc uugggggugg gac                                               23


<210> SEQ ID NO 329
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 329

ccaauguauu uauacauuua caagua                                            26


<210> SEQ ID NO 330
<211> LENGTH: 29
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 330

aaguucaaug agaaagagaa uagauaugg                                         29


<210> SEQ ID NO 331
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 331

uacuuacaug ccaaaucuca a                                                 21


<210> SEQ ID NO 332
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 332

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<210> SEQ ID NO 333
<211> LENGTH: 22
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 333

uacauacuau uaaugugauu ua                                              22


<210> SEQ ID NO 334
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 334

uuuuguccuu ccaauugugu ug                                              22


<210> SEQ ID NO 335
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 335

gaagcagaga gaaaguagag aag                                             23


<210> SEQ ID NO 336
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 336

ucaaaaggag agaacagaug cugg                                            24


<210> SEQ ID NO 337
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 337

ucccuggaug gcaagcagaa gca                                             23


<210> SEQ ID NO 338
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 338

ccucuaaguu uccuaagguu cu                                              22
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<210> SEQ ID NO 339
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 339

aacaagagca ggccagugug gugg 24

<210> SEQ ID NO 340
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 340

uugaggaaaa gggaacccug uaca 24

<210> SEQ ID NO 341
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<400> SEQUENCE: 341

ccaggcacug ggaagucagu ggca 24

<210> SEQ ID NO 342
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 342

aauuaggagu gauaccuuca cuaa 24

<210> SEQ ID NO 343
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 343

ugagaaaaag gccacugucc uuua 24

<210> SEQ ID NO 344
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 344

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acaaauugga gaaauaguga aaa                                            23


<210> SEQ ID NO 345
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 345

auuuuaaaac acuuaaaaau uu                                             22


<210> SEQ ID NO 346
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 346

aaaggaagaa auugaaaccc aga                                            23


<210> SEQ ID NO 347
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 347

gaugucauca agaaugcaga ugc                                            23


<210> SEQ ID NO 348
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 348

acaaaagaug cagaaagagg caag                                           24


<210> SEQ ID NO 349
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 349

aauguuauug aguauauaga gaga                                           24


<210> SEQ ID NO 350
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence
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<400> SEQUENCE: 350

cauuugauga ucuggcauuc caacu                                           25


<210> SEQ ID NO 351
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 351

gaagggaggc ugauccagaa cagu                                            24


<210> SEQ ID NO 352
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 352

ggcacaacug gaguggaguc ugcu                                            24


<210> SEQ ID NO 353
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 353

caaaagaaaa gaaagaagag cuc                                             23


<210> SEQ ID NO 354
<211> LENGTH: 22
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 354

uccaaauugc uucaaaugaa aa                                              22


<210> SEQ ID NO 355
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 355

aauuguacaa aaacccugau ac                                              22


<210> SEQ ID NO 356
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 356

augaggaaug gagggaauag cu                                              22


<210> SEQ ID NO 357
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 357

auugcuccuu ugcuggaugg au                                              22


<210> SEQ ID NO 358
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 358

uuccaaucug aaugaugcaa ca                                              22


<210> SEQ ID NO 359
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 359

uaaaagcugc aucaauaggu gu                                              22


<210> SEQ ID NO 360
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 360

gggagauuga uccaaaacag ca                                              22


<210> SEQ ID NO 361
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 361

agggggaagc ccagauccug ga                                              22


<210> SEQ ID NO 362
<211> LENGTH: 22
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 362

ugccacagag gagacacaca aa                                             22


<210> SEQ ID NO 363
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 363

gagaaaggaa aguggacaac a                                              21


<210> SEQ ID NO 364
<211> LENGTH: 25
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 364

cauaacaaca acaauaauaa cugaa                                          25


<210> SEQ ID NO 365
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 365

aggaagggaa aauacaaaaa au                                             22


<210> SEQ ID NO 366
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 366

gaggaaauga gaagaaggcu a                                              21


<210> SEQ ID NO 367
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 367

cuggagcugc uggagcagca g                                              21
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 368

ucucaaacuu gcaguugguc                                                   20


<210> SEQ ID NO 369
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 369

uugacuaugg gagugauguu u                                                 21


<210> SEQ ID NO 370
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 370

aguuugaauu cauugcugaa g                                                 21


<210> SEQ ID NO 371
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 371

gaaaaacaag auuucuccca gug                                               23


<210> SEQ ID NO 372
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 372

acagggugau gguguccccc                                                   20


<210> SEQ ID NO 373
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 373
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aaauggacca caaacacaga aac                                              23


<210> SEQ ID NO 374
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 374

augucuucuu caaucacuuc aac                                              23


<210> SEQ ID NO 375
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 375

uacugcuaag gaagcacaag aug                                              23


<210> SEQ ID NO 376
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 376

aaaaauugaa acgaacaaau uc                                               22


<210> SEQ ID NO 377
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 377

aauaaauaca acauuacccu uu                                               22


<210> SEQ ID NO 378
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 378

aagcaagauu aaaaagagag ga                                               22


<210> SEQ ID NO 379
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence
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<400> SEQUENCE: 379

uuagagcauc uguuggaaga au                                              22


<210> SEQ ID NO 380
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 380

aacagaggcu gaacaagagg a                                               21


<210> SEQ ID NO 381
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 381

ugcagaagga acaggaacgg c                                               21


<210> SEQ ID NO 382
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 382

auuguaugga cacaauuaga aac                                             23


<210> SEQ ID NO 383
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 383

augagaaacg ugccugagaa aca                                             23


<210> SEQ ID NO 384
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 384

uguuuucuuc ugucugaaga                                                 20


<210> SEQ ID NO 385
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<400> SEQUENCE: 385

cauauaauua gcaucacaau                                                    20


<210> SEQ ID NO 386
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 386

acaaaucagc aguuugaacu gaua                                               24


<210> SEQ ID NO 387
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 387

gaaagaggua aauuaaaaag                                                    20


<210> SEQ ID NO 388
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 388

aaguagcagg cucacucugc                                                    20


<210> SEQ ID NO 389
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 389

agaaggagag aaggaaaaug g                                                  21


<210> SEQ ID NO 390
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<210> SEQ ID NO 391
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 391

aaugaaucaa caagaaagaa aa                                              22


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<400> SEQUENCE: 392

aaugaaucaa caagaaagaa                                                 20


<210> SEQ ID NO 393
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<212> TYPE: RNA
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<400> SEQUENCE: 393

gagaaugaag agaaaacucc                                                 20


<210> SEQ ID NO 394
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<400> SEQUENCE: 394

auucagugaa auuggaaaau                                                 20


<210> SEQ ID NO 395
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 395

agaaauacac caagaccaca ua                                              22


<210> SEQ ID NO 396
<211> LENGTH: 21
<212> TYPE: RNA
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<400> SEQUENCE: 396

cuugaacuua gaagcagaua u                                               21
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<210> SEQ ID NO 397
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<400> SEQUENCE: 397

acaaugcuau caauuguaau c 21

<210> SEQ ID NO 398
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<212> TYPE: RNA
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<400> SEQUENCE: 398

acaaugcuau caauuguaau 20

<210> SEQ ID NO 399
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 399

gaacuucagg acauagaaaa u 21

<210> SEQ ID NO 400
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 400

gccuuccuuu ccagaaugug 20

<210> SEQ ID NO 401
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 401

gauaugacuu ugaaagggag 20

<210> SEQ ID NO 402
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 402

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agggguugga auggcugcag                                                20


<210> SEQ ID NO 403
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 403

cagaguagaa ugcaauucuc cuca                                           24


<210> SEQ ID NO 404
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 404

uuccugcuuu accauaauga cuga                                           24


<210> SEQ ID NO 405
<211> LENGTH: 24
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 405

uuucauaaug ucagcaaaua ugca                                           24


<210> SEQ ID NO 406
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 406

ggucuacaaa acauacuuug agaa                                           24


<210> SEQ ID NO 407
<211> LENGTH: 25
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 407

caaaauuaga gagacagaaa auaga                                          25


<210> SEQ ID NO 408
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 408

gaagcaaaac uguuugugcu                                                   20


<210> SEQ ID NO 409
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<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 409

uuguuuuuau guggagcuaa uca                                               23


<210> SEQ ID NO 410
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 410

cacaaaggac aauaggaaag aaa                                               23


<210> SEQ ID NO 411
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 411

uaaagaaauu gaaucaguaa auaa                                              24


<210> SEQ ID NO 412
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 412

agugagacac agggaacaga gaaa                                              24


<210> SEQ ID NO 413
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 413

cauaugaaag aaugugcaac auc                                               23


<210> SEQ ID NO 414
<211> LENGTH: 24
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 414

uucaaugaau caacaaaaaa gaaa                                             24


<210> SEQ ID NO 415
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 415

cagcagauaa aagaauaaug gaaaug                                           26


<210> SEQ ID NO 416
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 416

aguugauaau aacaacuggu cuggu                                            25


<210> SEQ ID NO 417
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 417

agaagaagaa aaagaggacu auuu                                             24


<210> SEQ ID NO 418
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 418

cuucccaguu uuggaguguc ugggau                                           26


<210> SEQ ID NO 419
<211> LENGTH: 25
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 419

aaauuuaaau aagaaaaugg aagau                                            25


<210> SEQ ID NO 420
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 420

aaucuaaugg gaauuuaaua gcuc                                              24


<210> SEQ ID NO 421
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 421

augcagaacu uucuuuuuga cuc                                               23


<210> SEQ ID NO 422
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 422

acauucuuuu caugugggc auaa                                               24


<210> SEQ ID NO 423
<211> LENGTH: 22
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 423

cuagucaggc uaggcagaug gu                                                22


<210> SEQ ID NO 424
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 424

caaagcagaa ugcaguucuc uu                                                22


<210> SEQ ID NO 425
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 425

ugcaccaauu aaaauacaga uau                                               23
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<400> SEQUENCE: 426

agaguaagag acaacaugac ca                                              22


<210> SEQ ID NO 427
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 427

gggaauuggg acaaugguga ug                                              22


<210> SEQ ID NO 428
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<212> TYPE: RNA
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aaugccuugu uucuacuaau ac                                              22


<210> SEQ ID NO 429
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 429

uaagaggauc aggaaugaga au                                              22


<210> SEQ ID NO 430
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 430

aucucauuua aggaaugaca ca                                              22


<210> SEQ ID NO 431
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 431
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agacaaugcu aaggaaauag gg                                            22


<210> SEQ ID NO 432
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<400> SEQUENCE: 432

aaagcaauga aagaguaugg ggag                                          24


<210> SEQ ID NO 433
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 433

uuggucugag gaaugugccu gcu                                           23


<210> SEQ ID NO 434
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 434

aucaaugaac aaagaggaaa ua                                            22


<210> SEQ ID NO 435
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 435

cagagagagg caaauuaaaa ag                                            22


<210> SEQ ID NO 436
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 436

cacaaauuga agaugacaga ga                                            22


<210> SEQ ID NO 437
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence
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<400> SEQUENCE: 437

aaacaagaag ugcuuaugag ag                                              22


<210> SEQ ID NO 438
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 438

uuuuuuucaa augcaucuau caa                                             23


<210> SEQ ID NO 439
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 439

cagaaauucg aagaaauaaa aug                                             23


<210> SEQ ID NO 440
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 440

cagccuaauc agaccaaaug aa                                              22


<210> SEQ ID NO 441
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 441

ggacggauua agaaagaaga gu                                              22


<210> SEQ ID NO 442
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 442

uggaguugau aaggggaagg ga                                              22


<210> SEQ ID NO 443
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<212> TYPE: RNA
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<400> SEQUENCE: 443

acagauuuga aauaauugaa gg                                              22


<210> SEQ ID NO 444
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<400> SEQUENCE: 444

ugcaugugua aauggcucuu g                                               21


<210> SEQ ID NO 445
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 445

cuuuuccuga aagugccagc a                                               21


<210> SEQ ID NO 446
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 446

aagacaagaa auggccagua gg                                              22


<210> SEQ ID NO 447
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 447

cugcauuuga agauuuaaga uug                                             23


<210> SEQ ID NO 448
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 448

ccauuaucca aaggucuaca aa                                              22


<210> SEQ ID NO 449
<211> LENGTH: 22
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 449

ugagacuucc aagaucaaga ug                                                22


<210> SEQ ID NO 450
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 450

gcaggagugg auagauucua ca                                                22


<210> SEQ ID NO 451
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<212> TYPE: RNA
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<400> SEQUENCE: 451

aaagcaaauu guagaaaaga uu                                                22


<210> SEQ ID NO 452
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 452

ugcagggaag aacacagauc uc                                                22


<210> SEQ ID NO 453
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 453

ucaaaugcau gaagacauuc uu                                                22


<210> SEQ ID NO 454
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 454

agaaguuaua aggaugaugg a                                                 21
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 455

cugccccauc ggugaagcuc c                                                21


<210> SEQ ID NO 456
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 456

aauaccagcc uuccauuuca gaau                                             24


<210> SEQ ID NO 457
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 457

aaugaaucca aaucaaagga                                                  20


<210> SEQ ID NO 458
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 458

augccuuguu ucuacuaaua c                                                21


<210> SEQ ID NO 459
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 459

ugaguugcca uucaccauug a                                                21


<210> SEQ ID NO 460
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 460
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auacauugaa guuuuacauu u                                                21


<210> SEQ ID NO 461
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 461

gugugauggg aaugguugga guau                                             24


<210> SEQ ID NO 462
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 462

auaugcacaa acagaaugug u                                                21


<210> SEQ ID NO 463
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 463

uggauuuguu gccaauuuca                                                  20


<210> SEQ ID NO 464
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 464

auuauaaaag gaaggucuca                                                  20


<210> SEQ ID NO 465
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 465

ccaaagaggg aagacgaaag                                                  20


<210> SEQ ID NO 466
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence
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<400> SEQUENCE: 466

uauauaaaua gaacaggaac au 22

<210> SEQ ID NO 467
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 467

acaauaaaaa guuggagaaa ca 22

<210> SEQ ID NO 468
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 468

aaagccaugg aacaaauggc ug 22

<210> SEQ ID NO 469
<211> LENGTH: 25
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 469

ggucuacaaa acauacuuug agaaa 25

<210> SEQ ID NO 470
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 470

aauaguuuac uugaauaaua ca 22

<210> SEQ ID NO 471
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 471

uucaagaugg agaaagggaa ga 22

<210> SEQ ID NO 472
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence

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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 472

aaaagaaaua caccaaaaca gu 22

<210> SEQ ID NO 473
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 473

aaccuaaauu ucucccagau uu 22

<210> SEQ ID NO 474
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 474

acaaccuacu uucucaguac aga 23

<210> SEQ ID NO 475
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 475

aaauucaaac aaggagauca uu 22

<210> SEQ ID NO 476
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 476

uggucagguu auucuggcau uu 22

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gaaaucaacc ugaaugguuu                                                 20


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cuuucuuaa aaauuccagc gc                                               22


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agagaaggau auucucuggu c                                               21


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ugauuauugc ugcuagaaac aua                                              23


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ugauuauugc ugcuagaaac au                                               22


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agggcaagcu uucccaaaug ucu                                              23


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gauaguaagu ggaagagaug aa                                               22


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cauaugaaag aaugugcaac au                                               22


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auaauacuag uaguaacagu aa                                               22


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aaaaaugaug accaauucuc a                                                 21


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<400> SEQUENCE: 502

uauggaauuc ucucuuacug a                                                 21


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<220> FEATURE:
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<400> SEQUENCE: 503

aaaaaacaaa gauugaguaa ga                                                22


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<400> SEQUENCE: 504

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<210> SEQ ID NO 506
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<220> FEATURE:
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<210> SEQ ID NO 507
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<220> FEATURE:
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<400> SEQUENCE: 507

cuguaaugag aaugggagac cu                                              22


<210> SEQ ID NO 508
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 508

ggaaauugug aaaauucaau gg                                              22


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<220> FEATURE:
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<400> SEQUENCE: 509

uuuugcuuug uguuguuuug cug                                             23


<210> SEQ ID NO 510
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 510

aggacuucga gaaauauguu ga                                              22


<210> SEQ ID NO 511
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 511

aaacaacaua acaacaacaa uaa                                             23


<210> SEQ ID NO 512
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<220> FEATURE:
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<400> SEQUENCE: 512

aaaaugcuga ggauaugggc aa                                              22
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<220> FEATURE:
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<400> SEQUENCE: 513

uuucaccauu accuucucuu cc                                               22


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<220> FEATURE:
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ucuuauuucu ucagagacaa ug                                               22


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acagaaaugu cacugagagg ag                                               22


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gacuacagau auacauauag au                                              22


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gaaaaaggag agugagagac aa                                              22


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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

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uagauauaaa ugugaaagau ua                                              22


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<212> TYPE: RNA
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<400> SEQUENCE: 521

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<212> TYPE: RNA
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<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 522

acuuaccagu cucaucuucu a                                               21


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<212> TYPE: RNA
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<212> TYPE: RNA
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<220> FEATURE:
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<223> OTHER INFORMATION: Fragment coding sequence

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ucucucugcc uuguaguugg                                                    20


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uauaacuuau uacuucagaa                                                    20


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agaaaucaua ucaaauccuu                                                    20


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uucagacaga ucagaccuca                                                    20


<210> SEQ ID NO 529
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aauauccaga augguuucug                                                    20


<210> SEQ ID NO 530
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<212> TYPE: RNA
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<223> OTHER INFORMATION: Fragment coding sequence

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aagucaacau gaaaaaaaca g                                                 21


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ugaaaaaaac aagaucuuaa                                                   20


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ggggguucu uuuugaaaaa                                                    20


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<400> SEQUENCE: 533

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<220> FEATURE:
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<400> SEQUENCE: 534

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<210> SEQ ID NO 535
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<220> FEATURE:
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<400> SEQUENCE: 535

gugcuccuca ugaaaugucu gu                                                22


<210> SEQ ID NO 536
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<220> FEATURE:
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<400> SEQUENCE: 536

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<220> FEATURE:
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<400> SEQUENCE: 537

cucagccaua aaaaugaacg                                                  20


<210> SEQ ID NO 538
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 538

auugcagaaa guuucuccaa aa                                               22


<210> SEQ ID NO 539
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<400> SEQUENCE: 539

agacuggacc agcuauggaa uc                                               22


<210> SEQ ID NO 540
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 540

auguaaucac cuuauacaug aac                                              23


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<220> FEATURE:
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<400> SEQUENCE: 541

ggaaggacuu gguaaaguuc                                                  20
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aaauccugag gcacuucaac au                                              22


<210> SEQ ID NO 543
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gucugucauc ucacuggauc                                                 20


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<400> SEQUENCE: 545

aaacauugca gacaggauag                                                 20


<210> SEQ ID NO 546
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<212> TYPE: RNA
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<400> SEQUENCE: 546

uguaauucua gccugagucu                                                 20


<210> SEQ ID NO 547
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<212> TYPE: RNA
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<400> SEQUENCE: 547
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ccaggaaagu cuucagagga u                                               21


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uaaaagaucu uuucuugucu                                                 20


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agacaaauaa ggucaggaga                                                 20


<210> SEQ ID NO 550
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<400> SEQUENCE: 550

agacaacacc cacuccuucu                                                 20


<210> SEQ ID NO 551
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<400> SEQUENCE: 551

uagguucaag ucugccagau aca                                             23


<210> SEQ ID NO 552
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<400> SEQUENCE: 552

cuuaccaguc ucaucuucua c                                               21


<210> SEQ ID NO 553
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<212> TYPE: RNA
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ggccuugcuc uucagagagg                                                   20


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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 554

caugcagcua gaaccaugac                                                   20


<210> SEQ ID NO 555
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 555

ggggaagaaa agugguaggc a                                                 21


<210> SEQ ID NO 556
<211> LENGTH: 20
<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 556

acaggauaga gcagauuuuu                                                   20


<210> SEQ ID NO 557
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 557

uugaaaauga accuugauga                                                   20


<210> SEQ ID NO 558
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 558

caugagcaag aucuuuguca a                                                 21


<210> SEQ ID NO 559
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 559

ucuugugaca uuuuuaccaa u                                                 21


<210> SEQ ID NO 560
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 560

caggaacaca agaaccaaag                                                   20


<210> SEQ ID NO 561
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 561

uucacauuaa aaaagugaua                                                   20


<210> SEQ ID NO 562
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 562

cuguuggaau ggccaggaug                                                   20


<210> SEQ ID NO 563
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 563

aagguggaga acucagaguu u                                                 21


<210> SEQ ID NO 564
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 564

gcauuuggaa gguaucuugc                                                   20


<210> SEQ ID NO 565
<211> LENGTH: 20
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 565

cucuauuucu ugcacuugug                                                    20


<210> SEQ ID NO 566
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 566

aagaagagac cauguguagu uau                                                23


<210> SEQ ID NO 567
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 567

auaaugcauu uggaagguau                                                    20


<210> SEQ ID NO 568
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 568

cuaugaaguc aucaaaauau                                                    20


<210> SEQ ID NO 569
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 569

uucucauuuu uguuguuuau uu                                                 22


<210> SEQ ID NO 570
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 570

auaacagacc uauaacuuau                                                    20
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<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 571

agagagacac aaggcuaaga                                                 20


<210> SEQ ID NO 572
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 572

uuaguccaga gagcagaaaa                                                 20


<210> SEQ ID NO 573
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 573

cacugccucc uucagcaauc a                                               21


<210> SEQ ID NO 574
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 574

uaugaaguca ucaaaauauu                                                 20


<210> SEQ ID NO 575
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 575

cauuaaaaaa gugauagaua                                                 20


<210> SEQ ID NO 576
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 576
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agagagcauc caaagggagu g                                                21


<210> SEQ ID NO 577
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 577

aaaaaaugua ccagguguga                                                  20


<210> SEQ ID NO 578
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 578

aacaugagca agaucuuugu                                                  20


<210> SEQ ID NO 579
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 579

aaucacauuc uuucaccaga a                                                21


<210> SEQ ID NO 580
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 580

ccucacucuu auuucaucca                                                  20


<210> SEQ ID NO 581
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 581

cauucacuuu guaggaugcu                                                  20


<210> SEQ ID NO 582
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence
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<400> SEQUENCE: 582

aucagaaagg cuuuauauga c                                                 21


<210> SEQ ID NO 583
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 583

uguauuuaua aaagacaagg u                                                 21


<210> SEQ ID NO 584
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 584

cucauuuuug uuguuuauuu                                                   20


<210> SEQ ID NO 585
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 585

ugccaagcuu guguucaaca                                                   20


<210> SEQ ID NO 586
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 586

ugggcucuga caggaggcau g                                                 21


<210> SEQ ID NO 587
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 587

aaguuaauua ccuuuacauu                                                   20


<210> SEQ ID NO 588
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 588

uacuaugaug uaucuaucua 20

<210> SEQ ID NO 589
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 589

aggaggguau ucuucuguau 20

<210> SEQ ID NO 590
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 590

gaacccagag gaaccccac 20

<210> SEQ ID NO 591
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 591

cacugccucc uucagcaauc a 21

<210> SEQ ID NO 592
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 592

agagcucaag aaggagacaa 20

<210> SEQ ID NO 593
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 593

aagaggggcu ccucuaugaa 20

<210> SEQ ID NO 594
<211> LENGTH: 20

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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 594

ucuacugcuu uaggugacgu                                                   20


<210> SEQ ID NO 595
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 595

agaugggugg aucaagaggu                                                   20


<210> SEQ ID NO 596
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 596

aacggugacg aggcugagga                                                   20


<210> SEQ ID NO 597
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 597

cagaggaugu auuuucuguc                                                   20


<210> SEQ ID NO 598
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 598

cacauccacu gccuccuuca                                                   20


<210> SEQ ID NO 599
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 599

agggaugucu ugugacauuu uu                                                22
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<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 600

cuucagaaag caagucauuc ua                                              22


<210> SEQ ID NO 601
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 601

uacaucucag ccauaaaaau g                                               21


<210> SEQ ID NO 602
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 602

uuacugagug caggggcccu ga                                              22


<210> SEQ ID NO 603
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 603

ucaacuuucc caacccucca                                                 20


<210> SEQ ID NO 604
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 604

cagagggaca gggagggagg u                                               21


<210> SEQ ID NO 605
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 605
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agucagaacu uggaaugaga u 21

<210> SEQ ID NO 606
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 606

ucaaagauua gagucaacag a 21

<210> SEQ ID NO 607
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 607

caugaacugg guauacaagu u 21

<210> SEQ ID NO 608
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 608

cugaugacau gcuggagaag a 21

<210> SEQ ID NO 609
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 609

uggucacgug uucaaucuca u 21

<210> SEQ ID NO 610
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 610

uuaugaagac uguucaggac u 21

<210> SEQ ID NO 611
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

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<400> SEQUENCE: 611

cugguggaga uaaaacguac uga                                            23


<210> SEQ ID NO 612
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 612

uugauuguuu uucucauuuu                                                20


<210> SEQ ID NO 613
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 613

ugguuucugg ggcugugccu c                                              21


<210> SEQ ID NO 614
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 614

gagccagggc aggagacagc                                                20


<210> SEQ ID NO 615
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Fragment coding sequence

<400> SEQUENCE: 615

ggguucuuuu ugaaaaaaaa                                                20


<210> SEQ ID NO 616
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 616

attctagagc tagcgaattc tcatcaactt gtatgatgtg ttacaaacgt aatagagca     59


<210> SEQ ID NO 617
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
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<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 617

gaccttctaa caccattaac aatagttgta cattcgactc ttgttgctct attacgttt        59


<210> SEQ ID NO 618
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 618

gtagtttgca aaagccttta cctccattag catagacata aaaggacctt ctaacacca        59


<210> SEQ ID NO 619
<211> LENGTH: 57
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 619

tccttcgcgg ccgcggatca caattaacac aattccaatt gtgtagtttg caaaagc          57


<210> SEQ ID NO 620
<211> LENGTH: 57
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 620

attctagagc tagcgaattc aacaacatta tcaacaatgc aagagatggt tgtgttc          57


<210> SEQ ID NO 621
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 621

aaccattagt ttggctgctg ttgtaagagg tattatgttc aagggaacac aaccatctc        59


<210> SEQ ID NO 622
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 622

gtaccatcac acgtattttt atatgtgtta tagtctggta tgacaaccat tagtttggc        59


<210> SEQ ID NO 623
<211> LENGTH: 59
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<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 623

tccttcgcgg ccgcggatcc aatgctgatg cataagtaaa tgttgtacca tcacacgta        59


<210> SEQ ID NO 624
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 624

attctagagc tagcgaattc cttaacaaag ttgttagtac aactactaac atagttaca        59


<210> SEQ ID NO 625
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 625

aagaaataag gcatataatt agtacaaaca cggtttaaac accgtgtaac tatgttagt        59


<210> SEQ ID NO 626
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 626

aatttgtact tctagtaaaa gtacacaatt gtagcaataa agtaaagaaa taaggcata        59


<210> SEQ ID NO 627
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 627

tccttcgcgg ccgcggatcc tcggcataga tgctttaatt ctagaatttg tacttctag        59


<210> SEQ ID NO 628
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 628

attctagagc tagcgaattc ggagtacgat cgagtgtaca gtgaacaatg ctagggaga        59
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<210> SEQ ID NO 629
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 629

actaaaatta attttacaca ttagggctct tccatatagg cagctctccc tagcattgt        59


<210> SEQ ID NO 630
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 630

actaaaatta attttacaca ttagggctct tccatatagg cagctctccc tagcattgt        59


<210> SEQ ID NO 631
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 631

tccttcgcgg ccgcggatcc tttttttttt tttttttttt ttttgtcatt ctcctaaga        59


<210> SEQ ID NO 632
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 632

attctagagc tagcgaattc gttaataatt ggttgaagca gttaattaaa gttacactt        59


<210> SEQ ID NO 633
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 633

acaggtgtta ttaaatagaa aatagcagca acaaaaagga acacaagtgt aactttaat        59


<210> SEQ ID NO 634
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 634
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ctatgatttc acttgaaaag tcagtatgtt tagacatgac atgaacaggt gttattaaa 59

<210> SEQ ID NO 635
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 635

tccttcgcgg ccgcggatcc caccaccatc aatagccttg tatcctatga tttcacttg 59

<210> SEQ ID NO 636
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 636

ctccctctgg aatttggtgc ctcagctgaa acagttcgag ttgaggaaga agaagagga 59

<210> SEQ ID NO 637
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 637

tggctcaatc tctgattgct cagtagtatc atccagccag tcttcctctt cttcttcct 59

<210> SEQ ID NO 638
<211> LENGTH: 40
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 638

attctagagc tagcgaattc ctccctctgg aatttggtgc 40

<210> SEQ ID NO 639
<211> LENGTH: 40
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 639

tccttcgcgg ccgcggatca tggctcaatc tctgattgct 40

<210> SEQ ID NO 640
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

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<400> SEQUENCE: 640

tatgggttgg gattatccaa aatgtgacag agccatgcct aacatgctta ggataatgg   59

<210> SEQ ID NO 641
<211> LENGTH: 58
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 641

aagttacagc aagtgttatg tttgcgagca agaacaagag aggccattat cctaagca   58

<210> SEQ ID NO 642
<211> LENGTH: 40
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 642

attctagagc tagcgaattc tatgggttgg gattatccaa   40

<210> SEQ ID NO 643
<211> LENGTH: 40
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 643

tccttcgcgg ccgcggatca aagttacagc aagtgttatg   40

<210> SEQ ID NO 644
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 644

gtgttggctg gactgctggc ttatcctcct ttgctgctat tccatttgca cagagtatc   59

<210> SEQ ID NO 645
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 645

gaaagaacct gttgagtaat gccaacaccg tttaacctat aaaagatact ctgtgcaaa   59

<210> SEQ ID NO 646
<211> LENGTH: 40
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence

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<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 646

attctagagc tagcgaattc gtgttggctg gactgctggc                              40


<210> SEQ ID NO 647
<211> LENGTH: 40
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 647

tccttcgcgg ccgcggatca gaaagaacct gttgagtaat                              40


<210> SEQ ID NO 648
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 648

aataaagtaa aacgtgcttt tgcagattac acccagtgtg ctgtaattgc tgttgttgc        59


<210> SEQ ID NO 649
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 649

gtatagaggt aacaaagcag atgcacaagc tattaagaac agcagcaaca acagcaatt        59


<210> SEQ ID NO 650
<211> LENGTH: 40
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 650

attctagagc tagcgaattc aataaagtaa aacgtgcttt                              40


<210> SEQ ID NO 651
<211> LENGTH: 40
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 651

tccttcgcgg ccgcggatca gtatagaggt aacaaagcag                              40


<210> SEQ ID NO 652
<211> LENGTH: 59
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<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 652

tgagaggaga gtgccagagt tgtgtgtaca acatgatggg aaaaagagaa aagaaacaa 59

<210> SEQ ID NO 653
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 653

tataccagat ggcgcggctg cccttggcct ttccaaattc cccttgtttc ttttctctt 59

<210> SEQ ID NO 654
<211> LENGTH: 45
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 654

gaagattcta gagctagcga attctgagag gagagtgcca gagtt 45

<210> SEQ ID NO 655
<211> LENGTH: 45
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 655

cagatccttc gcggccgcgg atcctatacc agatggcgcg gctgc 45

<210> SEQ ID NO 656
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<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 656

gtgatcaaaa atgggagtta tgttagtgcc atcacccaag ggaggaggga ggaagagac 59

<210> SEQ ID NO 657
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 657

ctgcttcttc ttcagcatcg aaggctcgaa gcactcaaca ggagtctctt cctccctcc 59

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<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 658

gaagattcta gagctagcga attcgtgatc aaaaatggga gttat                      45


<210> SEQ ID NO 659
<211> LENGTH: 45
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 659

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<210> SEQ ID NO 660
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<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 660

ctagtggtgc aactcattcg gaatatggag gctgaggaag ttctagagat gcaagactt        59


<210> SEQ ID NO 661
<211> LENGTH: 59
<212> TYPE: DNA
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<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 661

ctgcaaccag ttggtcactt tctctgacct ccgcagcagc cacaagtctt gcatctcta        59


<210> SEQ ID NO 662
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<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 662

gaagattcta gagctagcga attcctagtg gtgcaactca ttcgg                      45


<210> SEQ ID NO 663
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<212> TYPE: DNA
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<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 663
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<210> SEQ ID NO 664
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<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 664

aatactccac caacagatga tgtatcaagt cctcaccgac tcattctacc attttttaa        59


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<212> TYPE: DNA
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<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 665

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<210> SEQ ID NO 666
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<212> TYPE: DNA
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<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 666

gaagattcta gagctagcga attcaatact ccaccaacag atgat                      45


<210> SEQ ID NO 667
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<400> SEQUENCE: 667

cagatccttc gcggccgcgg atccttcttg ggcatcttga tcatg                      45


<210> SEQ ID NO 668
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<212> TYPE: DNA
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<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 668

ttttctaaat ccagaaaagt gtttttatcg aaacttcgga gatcctgtga cttctggac        59


<210> SEQ ID NO 669
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<212> TYPE: DNA
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<220> FEATURE:
<223> OTHER INFORMATION: Primer
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<211> LENGTH: 45
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 670

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<210> SEQ ID NO 671
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<212> TYPE: DNA
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<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 671

cagatccttc gcggccgcgg atcctctttc atgttaacca tttct                       45


<210> SEQ ID NO 672
<211> LENGTH: 46
<212> TYPE: DNA
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<220> FEATURE:
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<400> SEQUENCE: 672

gaagattcta gagctagcga attcagatct gagagagaaa aatctc                      46


<210> SEQ ID NO 673
<211> LENGTH: 45
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 673

cagatccttc gcggccgcgg atcctattat taattgctca tttaa                       45


<210> SEQ ID NO 674
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

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agatctgaga gagaaaaatc tcagggttac tctaaggaga aatattattt ttaaaattt        59


<210> SEQ ID NO 675
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<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 675

tattattaat tgctcattta agataagtgg tcagcattca agtaaatttt aaaaataat        59


<210> SEQ ID NO 676
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 676

tttaagacca atgacttaca aggcagctgt agatcttagc cactttttaa aagaaaagg        59


<210> SEQ ID NO 677
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<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 677

atatcttgtc ttctttggga gtgaattagc ccttccagtc cccccttttc ttttaaaaa        59


<210> SEQ ID NO 678
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 678

gaagattcta gagctagcga attctttaag accaatgact taca                        44


<210> SEQ ID NO 679
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 679

cagatccttc gcggccgcgg atccatatct tgtcttcttt ggga                        44


<210> SEQ ID NO 680
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 680

aagaaaaaat aaaagcatta gtagaaattt gtacagagat ggaaaaggaa gggaaaatt        59


<210> SEQ ID NO 681
<211> LENGTH: 59
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<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 681

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<210> SEQ ID NO 682
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 682

gaagattcta gagctagcga attcaagaaa aaataaaagc atta                        44


<210> SEQ ID NO 683
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 683

cagatccttc gcggccgcgg atcccaaata ctggagtatt gtat                        44


<210> SEQ ID NO 684
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 684

ggtctatctg gcatgggtac cagcacacaa aggaattgga ggaaatgaac aagtagata        59


<210> SEQ ID NO 685
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 685

ccatctaaaa atagtacttt cctgattcca gcactgacta atttatctac ttgttcatt        59


<210> SEQ ID NO 686
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 686

gaagattcta gagctagcga attcggtcta tctggcatgg gtac                        44
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<210> SEQ ID NO 687
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 687

cagatccttc gcggccgcgg atccccatct aaaaatagta cttt 44

<210> SEQ ID NO 688
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 688

cctgagtggg agtttgttaa taccccctccc ttagtgaaat tatggtacca gttagagaa 59

<210> SEQ ID NO 689
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 689

tgccccatct acatagaagg tttctgctcc tactatgggt tctttctcta actggtacc 59

<210> SEQ ID NO 690
<211> LENGTH: 45
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 690

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<210> SEQ ID NO 691
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 691

cagatccttc gcggccgcgg atcctgcccc atctacatag aagg 44

<210> SEQ ID NO 692
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 692

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ggagaattag atcgatggga aaaaattcgg ttaaggccag ggggaaagaa aaaatataa 59

<210> SEQ ID NO 693
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 693

gaatcgttct agctccctgc ttgcccatac tatatgtttt aatttatatt ttttctttc 59

<210> SEQ ID NO 694
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 694

gaagattcta gagctagcga attcggagaa ttagatcgat ggga 44

<210> SEQ ID NO 695
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 695

cagatccttc gcggccgcgg atccgaatcg ttctagctcc ctgc 44

<210> SEQ ID NO 696
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 696

cagaagcagg ggcaaggcca atggacatat caaatttatc aagagccatt taaaaatct 59

<210> SEQ ID NO 697
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 697

attagtgtgg gcacccctca ttcttgcata ttttcctgtt ttcagatttt taaatggct 59

<210> SEQ ID NO 698
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 698

gaagattcta gagctagcga attccagaag caggggcaag gcca 44

<210> SEQ ID NO 699
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 699

cagatccttc gcggccgcgg atccattagt gtgggcaccc ctca 44

<210> SEQ ID NO 700
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 700

aagtgtgtca gaaagtacaa cccaactaac atcttagaca taaaacaggg accaaaaga 59

<210> SEQ ID NO 701
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 701

cctcaagctt ttgtagaacc tgtctacata gctttggaac ggttcttttg gtccctgtt 59

<210> SEQ ID NO 702
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 702

gaagattcta gagctagcga attcaagtgt gtcagaaagt acaa 44

<210> SEQ ID NO 703
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 703

cagatccttc gcggccgcgg atcccctcaa gcttttgtag aacc 44

<210> SEQ ID NO 704
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence

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<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 704

caaagccagg gagtagtaga agcaatgaat caccacctaa agaatcagat aagtagaat        59


<210> SEQ ID NO 705
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 705

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<210> SEQ ID NO 706
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<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 706

gaagattcta gagctagcga attccaaagc cagggagtag taga                        44


<210> SEQ ID NO 707
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 707

cagatccttc gcggccgcgg atcctgccat cagtactatt gttt                        44


<210> SEQ ID NO 708
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 708

gggtggctgt ggaagctagt atcagtagaa ctctcacaag aggcagagga agatgaggc        59


<210> SEQ ID NO 709
<211> LENGTH: 59
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 709

atcatcatgt ctgcttgttt gtgctgggtg tactaagcag ttggcctcat cttcctctg        59


<210> SEQ ID NO 710
<211> LENGTH: 44
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<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 710

gaagattcta gagctagcga attcgggtgg ctgtggaagc tagt                        44


<210> SEQ ID NO 711
<211> LENGTH: 44
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

<400> SEQUENCE: 711

cagatccttc gcggccgcgg atccatcatc atgtctgctt gttt                        44


<210> SEQ ID NO 712
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 712

acagauacga uuaccuccau uuccga                                            26


<210> SEQ ID NO 713
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 713

auauugugua uauuuuuaug caca                                              24


<210> SEQ ID NO 714
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 714

aauauacgga auaaagaaau gaaa                                              24


<210> SEQ ID NO 715
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 715

uccucuuacu guuuuuuuuu uuuuuuu                                           27
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<210> SEQ ID NO 716
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 716

aacaacgacg auaaaagaua aauu 24

<210> SEQ ID NO 717
<211> LENGTH: 28
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 717

guacuucuuu guuaaauauu aaaugaau 28

<210> SEQ ID NO 718
<211> LENGTH: 29
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 718

cucaacuccu ucuucuucuc cuucugacc 29

<210> SEQ ID NO 719
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 719

auuguacgaa uccuauuacc ggag 24

<210> SEQ ID NO 720
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 720

uccucuuacu guuuuuuuuu uuuuuuu 27

<210> SEQ ID NO 721
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 721

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aagguaaacg ugucucauag aaaa                                          24


<210> SEQ ID NO 722
<211> LENGTH: 28
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 722

acgacauuaa cgacaacaac gacgacaa                                      28


<210> SEQ ID NO 723
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 723

cuuuuucucu uuucuuuguu ccc                                           23


<210> SEQ ID NO 724
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 724

cccuccuccc uccuucucug agg                                           23


<210> SEQ ID NO 725
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 725

caagaucucu acguucugaa cac                                           23


<210> SEQ ID NO 726
<211> LENGTH: 25
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 726

ugaguaagau gguaaaaaau uuaac                                         25


<210> SEQ ID NO 727
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence
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<400> SEQUENCE: 727

ucuaggacac ugaagaccug aaaa                                              24


<210> SEQ ID NO 728
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 728

uuuauaauaa aaauuuuaaa ugaa                                              24


<210> SEQ ID NO 729
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 729

ugaaaaauuu ucuuuucccc ccu                                               23


<210> SEQ ID NO 730
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 730

cuuuuccuuc ccuuuuaaag uuu                                               23


<210> SEQ ID NO 731
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 731

uuuacuuguu caucuauuua auc                                               23


<210> SEQ ID NO 732
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 732

uuuaauacca uggucaaucu cuuu                                              24


<210> SEQ ID NO 733
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 733

cuuucuuuuu uauauuuaau uuu                                               23


<210> SEQ ID NO 734
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 734

uaaauaguuc ucgguaaauu uuu                                               23


<210> SEQ ID NO 735
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 735

auuuuguccc ugguuuucuu ggca                                              24


<210> SEQ ID NO 736
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 736

ucuuagucua uucaucuuaa ucu                                               23


<210> SEQ ID NO 737
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 737

uccgucuccu ucuacuccgg uug                                               23


<210> SEQ ID NO 738
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auaguuuuuu aauucuuuuc caau                                              24


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uacucucuag aacccccacc cug 23

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cuuuuugagu ucuacuuucc uua 23

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uaacuaaccg aauucccucuu uuau 24

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uuaacaaaug gauaaauaac caaaacac 28

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ucuacuucgu cagugguugg cg                                              22


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uaaucuaaag uuguguccac gauguag                                         27


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aaccuuacaa aacgaggaga aau                                             23


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cuuuaaaaua auaaaacaag uca                                             23


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aaucgaucua aaugucuaaa ccu                                             23


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aacuccuuuu cccuugggac augu                                              24


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gguccgugac ccuucaguca ccgu                                              24


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uuaaauccuca cuauggaagu gauu                                             24


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acucuuuuuc cggugacagg aaau                                              24


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uguuuaaccu cuuuaucacu uuu                                               23


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aguuuuccuc ucuugucuac gacc                                             24


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guuuucuucc guaauuuucu ccu                                              23


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cucuaccuga aacuaaagac acu                                              23


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ccuuuagguc ccuccaaaac cuu                                              23


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uuuccuucuu uaacuuuggg ucu                                              23


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ucaaauuuaa auauagguuu uauuuaaa                                          28


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uucuuuucu auuuaucuug uguuucuuaa cuguuuuaaa                              40


<210> SEQ ID NO 765
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<220> FEATURE:
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<400> SEQUENCE: 765

agauucgcuu cauuguuguu cuca                                              24


<210> SEQ ID NO 766
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uugucuuucu ucguaauaau guaguccgaa ga                                     32


<210> SEQ ID NO 767
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acuaaauaua aaugaccaua uuuuauca                                          28


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uuguuuguuu ggucucugug auuccuuuac gu                                    32


<210> SEQ ID NO 769
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uauguuaguu uaacuuaccg ua                                               22


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ucuacuguua acacuuuaau uu                                               22


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<212> TYPE: RNA
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<220> FEATURE:
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caauauauac ccuuuacuac cuuaauugu                                        29


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<212> TYPE: RNA
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uuuuuugauu cacuaaguug u                                                21


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<212> TYPE: RNA
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uuuauguuuu uuauaugacu uauguu                                           26
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aaauguaagg accaguugau acuuuacuuu gauaacg                                 37


<210> SEQ ID NO 775
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gauguuuuuu uacgauuuuc uu                                                 22


<210> SEQ ID NO 776
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uacgacuugu ugaguuucuu uu                                                 22


<210> SEQ ID NO 777
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<212> TYPE: RNA
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uccuuucacu uuucuaccgu uu                                                 22


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uuacuccuuu cacuuuucua ccguuuucu                                          29


<210> SEQ ID NO 779
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<212> TYPE: RNA
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guucuuuuuu cuaucauagu a                                                21


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gguaucuuug uaaacuauug uuacuucuu                                        29


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uuucauauau aauacaaugu ugu                                              23


<210> SEQ ID NO 782
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<220> FEATURE:
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uacuauuguu guuauuagag aaa                                              23


<210> SEQ ID NO 783
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<212> TYPE: RNA
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ugauuaugug uacuauuguu                                                  20


<210> SEQ ID NO 784
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<212> TYPE: RNA
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<400> SEQUENCE: 784

acuauuguug uuauuagaga aacgau                                           26


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<212> TYPE: RNA
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<223> OTHER INFORMATION: Antisense fragment coding sequence
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cuuuuccuuu ucuucuaaag aac                                             23


<210> SEQ ID NO 786
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<212> TYPE: RNA
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<223> OTHER INFORMATION: Antisense fragment coding sequence

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uuacaugucg uagguuauuu uu                                              22


<210> SEQ ID NO 787
<211> LENGTH: 26
<212> TYPE: RNA
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auuaauaaaa cuuaccggug ggguac                                          26


<210> SEQ ID NO 788
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uuaauaaaac uuaccggugg g                                               21


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<212> TYPE: RNA
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agauauuuau uauauugauu u                                               21


<210> SEQ ID NO 790
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 790

auuuauaucu auuuuauaug uaau                                            24


<210> SEQ ID NO 791
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<212> TYPE: RNA
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<220> FEATURE:
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uuuacaaaca aauuaaugua ccuaaucau 29

<210> SEQ ID NO 792
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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uaccaauuau guaaccaaau uaaauau 27

<210> SEQ ID NO 793
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uugauauaau uuuugaauac aua 23

<210> SEQ ID NO 794
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<212> TYPE: RNA
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auaucuugua cuuuuuaauu uuaaaag 27

<210> SEQ ID NO 795
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<212> TYPE: RNA
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<220> FEATURE:
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aucuguuaua uugauauaau uuu 23

<210> SEQ ID NO 796
<211> LENGTH: 23
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 796

uuacaauggu aacaauagau uau 23

<210> SEQ ID NO 797
<211> LENGTH: 28

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<212> TYPE: RNA
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<220> FEATURE:
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uccauuuaau uacucucucu uaccucaa                                        28


<210> SEQ ID NO 798
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 798

auaaaauuuu ccgucuauua aucu                                            24


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ccuugaacca cguaaaaaaa gau                                             23


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<212> TYPE: RNA
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uaaaaagaac uaacgaaaag uu                                              22


<210> SEQ ID NO 801
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auaagacuuu uaccauauaa auu                                             23


<210> SEQ ID NO 802
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<220> FEATURE:
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<400> SEQUENCE: 802

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aguuguuuau aaauguccgu uuu                                               23


<210> SEQ ID NO 804
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

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aaucuuuuua ccuuuucaua ucu                                               23


<210> SEQ ID NO 805
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<212> TYPE: RNA
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<220> FEATURE:
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uucucgaguu guuuauaaau guc                                               23


<210> SEQ ID NO 806
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 806

agauuuauaa gucuuacgug aucucuuu                                          28


<210> SEQ ID NO 807
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 807

acuaccccca acugccucaa ccccuca                                           27


<210> SEQ ID NO 808
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 808
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<210> SEQ ID NO 809
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<212> TYPE: RNA
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<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 809

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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<223> OTHER INFORMATION: Antisense fragment coding sequence

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accgagcuuc ucguaccucu ccuu                                              24


<210> SEQ ID NO 811
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uccuuccccu aacucucuga gug                                               23


<210> SEQ ID NO 812
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<212> TYPE: RNA
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<223> OTHER INFORMATION: Antisense fragment coding sequence

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uuuuaucuga ccucuaccgg uacaccucuu cg                                     32


<210> SEQ ID NO 813
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 813

gucgcguccc cuucucaccc guccguc                                           27


<210> SEQ ID NO 814
<211> LENGTH: 32
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<223> OTHER INFORMATION: Antisense fragment coding sequence
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uuauucuuuu cguuguaaca cuaaaaauua au                                 32


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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 815

auuuuuuuca guuuaaauac uaau                                          24


<210> SEQ ID NO 816
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<212> TYPE: RNA
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gaaaccguaa agucacuaag ucguuuu                                       27


<210> SEQ ID NO 817
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uuuacacgag gggaaaggac cu                                            22


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aaaauuuccu caccacuucu ucuuucu                                       27


<210> SEQ ID NO 819
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 819

uuuauuauau uuacguaagu uga                                           23


<210> SEQ ID NO 820
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<400> SEQUENCE: 820

ccguccacac caacgaguuc gacauu                                          26


<210> SEQ ID NO 821
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 821

auauuguaaa aggacgaagg uu                                              22


<210> SEQ ID NO 822
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<212> TYPE: RNA
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aguaaccuuc uaccucgaga aa                                              22


<210> SEQ ID NO 823
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gucgaaugag aaggagucuc aagaaa                                          26


<210> SEQ ID NO 824
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aaauacuuaa gaugucuuua uuacuauuac                                      30


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caguuagguu uauaaccuuc uucgucuuca auua                                  34


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uacaccucug uaaggucgug ucuccuuug                                        29


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aguccgaguu cacuagagag uaaagu                                           26


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aauauaacuu caaauacuuc aac                                              23


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ucuauauccu uacacagacu uu                                               22
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auacggacua uuaaaaagua acc                                             23


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<400> SEQUENCE: 834

uauuuccuuu ucaguucuuu uaa                                             23


<210> SEQ ID NO 835
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ucucucucuc uuuucuuuua ac                                              22


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<400> SEQUENCE: 836

auacggacua uuaaaaagua ac                                              22


<210> SEQ ID NO 837
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uuucuguccu aaaguaauaa acau                                             24


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accuacacuc uuuaugaacc cu                                               22


<210> SEQ ID NO 840
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uuuucugucc uaaaguaaua aa                                               22


<210> SEQ ID NO 841
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uuuucugucc uaaaguaaua aacaua                                           26


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cuguccuaaa guaauaaaca ua                                               22


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cuuuuacaac agguuguuag guuaguu                                          27


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<400> SEQUENCE: 846

ccuucuuuuc uguaauuuga uuaa                                             24


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auuagaagau auucagauca uuu                                              23


<210> SEQ ID NO 848
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guccuuagga acaucacuac ccuaaca                                          27


<210> SEQ ID NO 849
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<400> SEQUENCE: 849

auauaaguua ccguuuucuu uuguuua                                          27


<210> SEQ ID NO 850
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<400> SEQUENCE: 850

uuacggaauu agagucuauu aaacaauu                                         28


<210> SEQ ID NO 851
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auuaaacaau uacuucuuau uuuaauu                                          27


<210> SEQ ID NO 852
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uuguucaaag aggaauagua uuu                                              23


<210> SEQ ID NO 853
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<400> SEQUENCE: 853

guaucauaga gaauauuagg aaaaguaaa                                        29


<210> SEQ ID NO 854
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<220> FEATURE:
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<400> SEQUENCE: 854

uaucauagag aauauuagga aaaguaaa                                         28


<210> SEQ ID NO 855
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<400> SEQUENCE: 855

auguuuguac ccguuaaguu uuag                                              24


<210> SEQ ID NO 856
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cgagaagaaa ggaauuguuu aca                                               23


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acaauuugug aaagaaagga aaa                                               23


<210> SEQ ID NO 858
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uaucauagag aauauuagga aaa                                               23


<210> SEQ ID NO 859
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uguugacuuu guuacguucc uua                                               23


<210> SEQ ID NO 860
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<212> TYPE: RNA
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<400> SEQUENCE: 860

caaguucccg guuaauauag ugu                                               23
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<210> SEQ ID NO 861
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<400> SEQUENCE: 861

auauuuuaaa agaguccaga ua 22

<210> SEQ ID NO 862
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<400> SEQUENCE: 862

ucuuuaaguc cuuuuaccuu uuu 23

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<400> SEQUENCE: 863

guguuucgag uucgugcaua aca 23

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<220> FEATURE:
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<400> SEQUENCE: 864

gaacaaaaga aagggaaaga aagac 25

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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 865

aaagaaaggg aaagaaagac gaaaga 26

<210> SEQ ID NO 866
<211> LENGTH: 29
<212> TYPE: RNA
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<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 866

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aaagaaaggg aaagaaagac gaa                                            23


<210> SEQ ID NO 868
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aaagaaaggg aaagaaagac gaaaga                                         26


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uauaccuaca ucuaaaguaa ac                                             22


<210> SEQ ID NO 870
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<220> FEATURE:
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<400> SEQUENCE: 870

aaaagaaagg gaaagaaaga cgaaaga                                        27


<210> SEQ ID NO 871
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<212> TYPE: RNA
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<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 871

uguagaaaug uuacaccuau aaagaag                                        27


<210> SEQ ID NO 872
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence
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<400> SEQUENCE: 872

aaguauguaa gauuugaauu aaggucua                                          28


<210> SEQ ID NO 873
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 873

cugauguucu cuuccuaccg ucu                                               23


<210> SEQ ID NO 874
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 874

uuaccgucaa uacuuauaua au                                                22


<210> SEQ ID NO 875
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 875

uuccaacaua aaauaauaaa uu                                                22


<210> SEQ ID NO 876
<211> LENGTH: 26
<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 876

ggaaaaagga aaaguaguga aaaaaa                                            26


<210> SEQ ID NO 877
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<220> FEATURE:
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<400> SEQUENCE: 877

guccuuuuuu uaccuaugau uu                                                22


<210> SEQ ID NO 878
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 878

uaauaaaaua uuaguaauag auuaau                                          26


<210> SEQ ID NO 879
<211> LENGTH: 27
<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 879

auauauauac guucaucgua uauauau                                         27


<210> SEQ ID NO 880
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 880

acaaucuaaa gaacaguaaa aaagg                                           25


<210> SEQ ID NO 881
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<212> TYPE: RNA
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<400> SEQUENCE: 881

ggugucguug uaccaaaguc aua                                             23


<210> SEQ ID NO 882
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 882

gaacaauuca ugaacuauag aca                                             23


<210> SEQ ID NO 883
<211> LENGTH: 23
<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 883

uaagagaaua auacuuauuu cgu                                             23


<210> SEQ ID NO 884
<211> LENGTH: 27
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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ucucucuuuc uuucucuuaa ccccuca                                         27


<210> SEQ ID NO 885
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 885

uauaccuaca ucuaaaguaa ac                                              22


<210> SEQ ID NO 886
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<212> TYPE: RNA
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uuguagaaua aaggaagaaa ag                                              22


<210> SEQ ID NO 887
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<212> TYPE: RNA
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aaaaaucggg aacguuucuu ga                                              22


<210> SEQ ID NO 888
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<212> TYPE: RNA
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<400> SEQUENCE: 888

gaaguaauuc acaaaaauag ccuucagu                                        28


<210> SEQ ID NO 889
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 889

acgggacuga aguguccggu aaa                                             23
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<400> SEQUENCE: 890

uaauagaauu cuuucuaauu ucuucuuaaa c                                      31


<210> SEQ ID NO 891
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 891

aguuucguuu uauccaaguc ucg                                               23


<210> SEQ ID NO 892
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 892

uugaaaaaua acuaggucac gagu                                              24


<210> SEQ ID NO 893
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<400> SEQUENCE: 893

ucuauagaaa guuuuuuaaa guu                                               23


<210> SEQ ID NO 894
<211> LENGTH: 27
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<400> SEQUENCE: 894

uacguauguu guuacccuua caguaaa                                           27


<210> SEQ ID NO 895
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 895
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uaacaaauau aaauaaaagu aaa                                              23


<210> SEQ ID NO 896
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 896

guuguauuuu uuaguuggua uaa                                              23


<210> SEQ ID NO 897
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 897

aggagaaaag aaaaggaaag aggaagaaa                                        29


<210> SEQ ID NO 898
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 898

gucuuuucgu cauacucuuc cu                                               22


<210> SEQ ID NO 899
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 899

aacggacccc uuuccuccgu ca                                               22


<210> SEQ ID NO 900
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 900

agaaaagaaa aggaaagagg aagaaa                                           26


<210> SEQ ID NO 901
<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence
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agaaaagaaa aggaaagagg aagaaa                                          26


<210> SEQ ID NO 902
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 902

caggagaaaa gaaaaggaaa gaggaagaaa                                      30


<210> SEQ ID NO 903
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 903

gaaaagaaaa ggaaagagga ag                                              22


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<211> LENGTH: 26
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 904

gagaaaagaa aaggaaagag gaagaa                                          26


<210> SEQ ID NO 905
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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aauuauucuu augucuaaau aa                                              22


<210> SEQ ID NO 906
<211> LENGTH: 25
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 906

agagacucaa ucuuuuacuc uuuca                                           25


<210> SEQ ID NO 907
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 907

gaaacguaau uuuuuacaca aacu                                            24


<210> SEQ ID NO 908
<211> LENGTH: 31
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 908

aaaauauaca gaucuuuuga aucugugaua u                                    31


<210> SEQ ID NO 909
<211> LENGTH: 25
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 909

gauguccuac aucuaaaacu uuuau                                           25


<210> SEQ ID NO 910
<211> LENGTH: 31
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 910

agaaacauaa gaccgaaagg aagaaaccaa c                                    31


<210> SEQ ID NO 911
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auguugguu cucucgaauu ug                                                 22


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guuauugguu ucucuuuuuu cuu                                               23


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uucguugguc cucuaaccaa gu 22

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uacguugacu cuagucucgu ag 22

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<400> SEQUENCE: 938

ggucuccugu ucucgagaac aa 22

<210> SEQ ID NO 939
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cuccugcucu acccaccuag uucu 24

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cuccugcucu acccaccuag uucuccag 28

<210> SEQ ID NO 941
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aaccgaguaa gagacaaaaa aaacaaaaaa aa 32

<210> SEQ ID NO 942
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cuccugcucu acccaccuag uucuccag 28

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gaguaagaga caaaaaaaac aaaaaaaa 28

<210> SEQ ID NO 944
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gaaauaagau uuuauaaaaa uuua 24

<210> SEQ ID NO 945
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uacucggguu cugaagaaaa cua 23

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<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 946

uucuuugaca cuaaaaauua ugaau 25

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uucuuacuau uucguuucuu uu 22

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augaaaauuu cuacguacga aaguaa                                            26


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aaauuuuuua cuauucuuau uu                                                22


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ucuuacuauu ucguuucuuu uacauc                                            26


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augacuagag guugagucuu cu                                                22


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uuuuaaacuu ucuuacuauu ucguuu                                            26


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uuuuuacuua cuuuuauacg uaagagaagu uuu 33

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uuucguucuu uuuacuuacu uuu 23

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guucuuuuua cuuacuuuua ua 22

<210> SEQ ID NO 956
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uccucuuuag uuuuguuuug guau 24

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cguaaguuau uuauguacga c 21

<210> SEQ ID NO 958
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<400> SEQUENCE: 958

uacauucuug acauuuauau u 21

<210> SEQ ID NO 959
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uuuuguuuug guauuuucau c                                               21


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<400> SEQUENCE: 960

uuuccucuuu aguuuuguuu ugguauuuu                                       29


<210> SEQ ID NO 961
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aucccucgag gggugagggc aaaacacug                                       29


<210> SEQ ID NO 962
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<400> SEQUENCE: 962

auauaguuuu cuuuuacuuu aguu                                            24


<210> SEQ ID NO 963
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<212> TYPE: RNA
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<220> FEATURE:
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cuaauuuaaa uauaguuuuc uuuuacuu                                        28


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<400> SEQUENCE: 964

auauaguuuu cuuuuacuuu aguuau                                          26


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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

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uuucuuuuac uuuaguuauc aacuccu                                           27


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auauaguuuu cuuuuacuuu aguuauc                                           27


<210> SEQ ID NO 967
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uacugguuua cauaucuaac ucu                                               23


<210> SEQ ID NO 968
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<212> TYPE: RNA
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<220> FEATURE:
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auauaguuuu cuuuuacuuu aguuaucaac uccu                                   34


<210> SEQ ID NO 969
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<212> TYPE: RNA
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auauaguuuu cuuuuacuuu aguuau                                            26


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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 970

aacuuuauuc uucuaaucua uaaaaauuaa                                        30


<210> SEQ ID NO 971
<211> LENGTH: 22
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<220> FEATURE:
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<400> SEQUENCE: 971

acuauaguaa aaguuaaugu au                                              22


<210> SEQ ID NO 972
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<212> TYPE: RNA
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uucuuuuucu ucuaucguuc uu                                              22


<210> SEQ ID NO 973
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ucgauuucaa accauccuuu uguu                                            24


<210> SEQ ID NO 974
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<212> TYPE: RNA
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<400> SEQUENCE: 974

uuuaguucau uuuauuguua uuuacuguau g                                    31


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<220> FEATURE:
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guaauuuaaa uauguuuguu uguguuu                                         27


<210> SEQ ID NO 976
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ucgauuucaa accauccuuu uguu                                            24
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cuuuauaugg uauauuuaua cuaca                                          25


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uuuauucuag ucuuaaaaua aau                                            23


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ucuuaauaua auuaugucau au                                             22


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ucguaauuuu guaaucuuua uaauuuauuc                                     30


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ucuuaauaua auuaugucau auauca                                         26


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cuucuuaaua aguguaauua uu                                              22


<210> SEQ ID NO 983
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cuucuuguuu gauaauuauu aa                                              22


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<212> TYPE: RNA
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auucuagucu uaaaauaaau aaugau                                          26


<210> SEQ ID NO 985
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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auuugguuug uaaaaaggaa ua                                              22


<210> SEQ ID NO 986
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uaaaauuuug ugaauuuuua aa                                              22


<210> SEQ ID NO 987
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<212> TYPE: RNA
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<400> SEQUENCE: 987

guuauaaaga cgacaaguua aguuacc                                         27


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<220> FEATURE:
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<400> SEQUENCE: 989

cguuuaaaua gaauuuaagu ucauguau                                      28


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<212> TYPE: RNA
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auugucugaa ccuuuuuaug uuaa                                          24


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uaauggaagu uuuuagaucu ugaaauaauu aagaguc                            37


<210> SEQ ID NO 992
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<220> FEATURE:
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<400> SEQUENCE: 992

uuuuaauuuu uguuuuuacu uucc                                          24


<210> SEQ ID NO 993
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 993

gaauaaaaua cagaagaaac aacaaaaa                                      28


<210> SEQ ID NO 994
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uaauaauugu ugaauaaaaa uaaauuagaa aau                                  33


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<212> TYPE: RNA
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uauuucuucu uauaauugua acuguaau                                        28


<210> SEQ ID NO 996
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 996

aauacuuaca aaauaguacu aauuucua                                        28


<210> SEQ ID NO 997
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<212> TYPE: RNA
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<400> SEQUENCE: 998

ucacucuuua cuacuacaac uagucu                                          26


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aaucuuuaca gaauucguaa cg                                              22


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guccuguaac uuuuacuucu cuuc                                            24


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<400> SEQUENCE: 1004

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<212> TYPE: RNA
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ugauucagua uauuuuuaug uucuuuuu                                        28
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uuguuaaacu caacuaucug uuacuua                                          27


<210> SEQ ID NO 1007
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uaguacaaag uaugaagauc gguaac                                           26


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cuuuguauga uucuuguguc cuu                                              23


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uccuucguuu uaauuugucu cuucuuu                                          27


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accuuuuacu uucuugaaac cu 22

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cgacgaccug ucagucacca aa 22

<210> SEQ ID NO 1014
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ccuaguucuu ucuucucaag agacucu 27

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ccccucugug uguuuaaguc ug 22

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ugguuuacuu uugggucgag uguucucagu 30

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uuuacucuua caccuuuggu ac 22

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ucuuuauucc ucucaaaccg cg 22

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ucuucucauc ugccuuucac cu 22

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cuguaagaaa ccgaccuuuc ucggauu 27

<210> SEQ ID NO 1021
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cuucucucgu cccguucuua guuuugaucc ga 32

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ucccguucga aaggguuuac ag 22

<210> SEQ ID NO 1023
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<400> SEQUENCE: 1023

ccuguacuaa ggucucuccu uacuuguucc uguu                                 34


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<212> TYPE: RNA
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ccuuuaacac uuuuaaguua cc                                              22


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<212> TYPE: RNA
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<220> FEATURE:
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cucagaugua agagucaaaa cag                                             23


<210> SEQ ID NO 1026
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<212> TYPE: RNA
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<220> FEATURE:
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cucugucugu cauuuccuuu ua                                              22


<210> SEQ ID NO 1027
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<220> FEATURE:
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acuucuuuuu gauuucuuuu uu                                              22


<210> SEQ ID NO 1028
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<220> FEATURE:
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ggucugucgu cugaccuucc gu                                              22


<210> SEQ ID NO 1029
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<212> TYPE: RNA
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<400> SEQUENCE: 1029

uuguccuuua guauaacuua aaca                                            24


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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

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ucauacguac cuuucuaaaa gaauuac                                         27


<210> SEQ ID NO 1031
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<400> SEQUENCE: 1031

gucucaaacu uaaaauacua guc                                             23


<210> SEQ ID NO 1032
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acucccauug uaaauuaaaa ccc                                             23


<210> SEQ ID NO 1033
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aaaaaagaaa aacucuuucc cgaagua                                         27


<210> SEQ ID NO 1034
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ucuuuuguug uccacaacua cuc                                             23
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aaaaaagaaa aacucuuucc cga                                              23


<210> SEQ ID NO 1036
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uuuacuuucu aaaggucuuu aac                                              23


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uguugucuau guuguuuacg accacucuua                                       30


<210> SEQ ID NO 1038
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1038

uguugucuau guuguuuacg accacucuua                                       30


<210> SEQ ID NO 1039
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<212> TYPE: RNA
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<400> SEQUENCE: 1039

uacucucuag aacccccacc cug                                              23


<210> SEQ ID NO 1040
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<223> OTHER INFORMATION: Antisense fragment coding sequence

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gguuacauaa auauguaaau guucau                                          26


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<400> SEQUENCE: 1041

uucaaguuac ucuuucucuu aucuauacc                                       29


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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1042

augaauguac gguuuagagu u                                               21


<210> SEQ ID NO 1043
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1043

ucaaguuacu cuuucucuua u                                               21


<210> SEQ ID NO 1044
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1044

auguaugaua auuacacuaa au                                              22


<210> SEQ ID NO 1045
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<400> SEQUENCE: 1045

aaaacaggaa gguuaacaca ac                                              22


<210> SEQ ID NO 1046
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence
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cuucgucucu cuuucaucuc uuc                                              23


<210> SEQ ID NO 1047
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1047

aguuuuccuc ucuugucuac gacc                                             24


<210> SEQ ID NO 1048
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1048

agggaccuac cguucgucuu cgu                                              23


<210> SEQ ID NO 1049
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

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guccuguaac uuuuacuucu cuuc                                             24


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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1050

uuguucucgu ccggucacac cacc                                             24


<210> SEQ ID NO 1051
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<212> TYPE: RNA
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<400> SEQUENCE: 1051

aacuccuuuu cccuugggac augu                                             24


<210> SEQ ID NO 1052
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1052

gguccgugac ccuucaguca ccgu                                         24


<210> SEQ ID NO 1053
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<212> TYPE: RNA
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<220> FEATURE:
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uuaauccuca cuauggaagu gauu                                         24


<210> SEQ ID NO 1054
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acucuuuuuc cggugacagg aaau                                         24


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uguuuaaccu cuuuaucacu uuu                                          23


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auaaucuuua uuguggauac u                                            21


<210> SEQ ID NO 1057
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1057

uuuccuucuu uaacuuuggg ucu                                          23


<210> SEQ ID NO 1058
<211> LENGTH: 23
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1058

cuacaguagu ucuuacgucu acg                                              23


<210> SEQ ID NO 1059
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1059

uguuuucuac gucuuucucc guuc                                             24


<210> SEQ ID NO 1060
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uuacaauaac ucauauaucu cucu                                             24


<210> SEQ ID NO 1061
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<212> TYPE: RNA
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<400> SEQUENCE: 1061

guaaacuacu agaccguaag guuga                                            25


<210> SEQ ID NO 1062
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<400> SEQUENCE: 1062

cuucccuccg acuaggucuu guca                                             24


<210> SEQ ID NO 1063
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1063

ccguguugac cucaccucag acga                                             24
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<400> SEQUENCE: 1064

guuuucuuuu cuuucuucuc gag                                              23


<210> SEQ ID NO 1065
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1065

agguuuaacg aaguuuacuu uu                                               22


<210> SEQ ID NO 1066
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1066

uuaacauguu uuugggacua ug                                               22


<210> SEQ ID NO 1067
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uacuccuuac cucccuuauc ga                                               22


<210> SEQ ID NO 1068
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 1068

uaacgaggaa acgaccuacc ua                                               22


<210> SEQ ID NO 1069
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

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aagguuagac uuacuacguu gu                                              22


<210> SEQ ID NO 1070
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<213> ORGANISM: Artificial Sequence
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<400> SEQUENCE: 1070

auuuucgacg uaguuaucca ca                                              22


<210> SEQ ID NO 1071
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1071

cccucuaacu agguuuuguc gu                                              22


<210> SEQ ID NO 1072
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<212> TYPE: RNA
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<400> SEQUENCE: 1072

ucccccuucg ggucuaggac cu                                              22


<210> SEQ ID NO 1073
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<212> TYPE: RNA
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<400> SEQUENCE: 1073

acggugucuc cucugugugu uu                                              22


<210> SEQ ID NO 1074
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 1074

cucuuuccuu ucaccuguug u                                               21


<210> SEQ ID NO 1075
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence
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<400> SEQUENCE: 1075

guauuguugu uguuauuauu gacuu                                           25


<210> SEQ ID NO 1076
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1076

uccuucccuu uuauguuuuu ua                                              22


<210> SEQ ID NO 1077
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<223> OTHER INFORMATION: Antisense fragment coding sequence

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cuccuuuacu cuucuuccga u                                               21


<210> SEQ ID NO 1078
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

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gaccucgacg accucgucgu c                                               21


<210> SEQ ID NO 1079
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<400> SEQUENCE: 1079

agaguuugaa cgucaaccag                                                 20


<210> SEQ ID NO 1080
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1080

aacugauacc cucacuacaa a                                               21


<210> SEQ ID NO 1081
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1081

ucaaacuuaa guaacgacuu c                                                 21


<210> SEQ ID NO 1082
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1082

cuuuuuguuc uaaagagggu cac                                               23


<210> SEQ ID NO 1083
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1083

ugucccacua ccacaggggg                                                   20


<210> SEQ ID NO 1084
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acaaaagaag acagacuucu 20

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guauauuaau cguaguguua 20

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uguuuagucg ucaaacuuga cuau 24

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ucuuuaugug guucuggugu au                                             22


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gaacuugaau cuucgucuau a                                              21


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<210> SEQ ID NO 1112
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cuauacugaa acuuucccuc                                                  20


<210> SEQ ID NO 1113
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<212> TYPE: RNA
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gucucaucuu acguuaagag gagu                                             24


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aaggacgaaa ugguauuacu gacu                                             24


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<212> TYPE: RNA
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aaaguauuac agucguuuau acgu                                              24


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ccagauguuu uguaugaaac ucuu                                              24


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<212> TYPE: RNA
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guuuuaaucu cucugucuuu uaucu                                             25


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aacaaaaaua caccucgauu agu                                               23


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auuucuuuaa cuuagucauu uauu                                              24


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ucacucugug ucccuugucu cuuu                                              24


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guauacuuuc uuacacguug uag                                               23


<210> SEQ ID NO 1125
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gucgucuauu uucuuauuac cuuuac                                            26


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ucuucuucuu uuucuccuga uaaa                                         24


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<212> TYPE: RNA
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<220> FEATURE:
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gaagggucaa aaccucacag acccua                                       26


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uuuaaauuua uucuuuuacc uucua                                        25


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uuagauuacc cuuaaauuau cgag                                         24


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<212> TYPE: RNA
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uacgucuuga aagaaaaacu gag                                          23


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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<400> SEQUENCE: 1133

uguaagaaaa guacaccccg uauu 24

<210> SEQ ID NO 1134
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 1134

gaucaguccg auccgucuac ca 22

<210> SEQ ID NO 1135
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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guuucgucuu acgucaagag aa 22

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<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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acgugguuaa uuuuaugucu aua 23

<210> SEQ ID NO 1137
<211> LENGTH: 22
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ucucauucuc uguuguacug gu 22

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<212> TYPE: RNA
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<220> FEATURE:
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cccuuaaccc uguuaccacu ac 22

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uuacggaaca aagaugauua ug                                             22


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<212> TYPE: RNA
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auucuccuag uccuuacucu ua                                             22


<210> SEQ ID NO 1141
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uagaguaaau uccuuacugu gu                                             22


<210> SEQ ID NO 1142
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ucuguuacga uuccuuuauc cc                                             22


<210> SEQ ID NO 1143
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ucuguuacga uuccuuuauc cc                                             22


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<210> SEQ ID NO 1145
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uaguuacuug uuucuccuuu au                                              22


<210> SEQ ID NO 1146
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<220> FEATURE:
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gucucucucc guuuaauuuu uc                                              22


<210> SEQ ID NO 1147
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<220> FEATURE:
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<400> SEQUENCE: 1147

guguuuaacu ucuacugucu cu                                              22


<210> SEQ ID NO 1148
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uuuguucuuc acgaauacuc uc                                              22


<210> SEQ ID NO 1149
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aaaaaaaguu uacguagaua guu                                             23


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gucuuuaagc uucuuuauuu uac                                             23
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gucggauuag ucugguuuac uu                                             22


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ccugccuaau ucuuucuucu ca                                             22


<210> SEQ ID NO 1153
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<212> TYPE: RNA
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<400> SEQUENCE: 1153

uuucguuacu uucucauacc ccuc                                           24


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<220> FEATURE:
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<400> SEQUENCE: 1154

ugucuaaacu uuauuaacuu cc                                             22


<210> SEQ ID NO 1155
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<212> TYPE: RNA
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acguacacau uuaccgagaa c                                              21


<210> SEQ ID NO 1156
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<210> SEQ ID NO 1157
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uucuguucuu uaccggucau cc                                              22


<210> SEQ ID NO 1158
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<400> SEQUENCE: 1158

gacguaaacu ucuaaauucu aac                                             23


<210> SEQ ID NO 1159
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<220> FEATURE:
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gguaauaggu uuccagaugu uu                                              22


<210> SEQ ID NO 1160
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<220> FEATURE:
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<400> SEQUENCE: 1160

acucugaagg uucuaguucu ac                                              22


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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1161

cguccucacc uaucuaagau gu                                              22


<210> SEQ ID NO 1162
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence
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<400> SEQUENCE: 1162

uuucguuuaa caucuuuucu aa 22

<210> SEQ ID NO 1163
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1163

acgucccuuc uugugucuag ag 22

<210> SEQ ID NO 1164
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1164

aguuuacgua cuucuguaag aa 22

<210> SEQ ID NO 1165
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1165

ucuucaauau uccuacuacc u 21

<210> SEQ ID NO 1166
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1166

gacggguag ccacuucgag g 21

<210> SEQ ID NO 1167
<211> LENGTH: 24
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1167

uuauggucgg aagguaaagu cuua 24

<210> SEQ ID NO 1168
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence

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<220> FEATURE:
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uuacuuaggu uuaguuuccu                                                    20


<210> SEQ ID NO 1169
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<212> TYPE: RNA
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<400> SEQUENCE: 1169

uacggaacaa agaugauuau g                                                  21


<210> SEQ ID NO 1170
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acucaacggu aagugguaac u                                                  21


<210> SEQ ID NO 1171
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<212> TYPE: RNA
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<400> SEQUENCE: 1171

uauguaacuu caaaauguaa a                                                  21


<210> SEQ ID NO 1172
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cacacuaccc uuaccaaccu caua                                               24


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uauacguguu ugucuuacac a                                                  21


<210> SEQ ID NO 1174
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accuaaacaa cgguuaaagu 20

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uaauauuuuc cuuccagagu 20

<210> SEQ ID NO 1176
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uaauauuuuc cuuccagagu 20

<210> SEQ ID NO 1177
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<212> TYPE: RNA
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auauauuuau cuuguccuug ua 22

<210> SEQ ID NO 1178
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<212> TYPE: RNA
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uguuauuuuu caaccucuuu gu 22

<210> SEQ ID NO 1179
<211> LENGTH: 22
<212> TYPE: RNA
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uuucgguacc uuguuuaccg ac 22

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<212> TYPE: RNA
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uuaucaaaug aacuuauuau gu                                              22


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aaguucuacc ucuuucccuu cu                                              22


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uuuucuuuau gugguuuugu ca                                              22


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uuuaaguuug uuccucuagu aa                                              22


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accaguccaa uaagaccgua aa                                              22


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guuggaccuu ggaccuugga                                                 20


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cuuuaguugg acuuaccaaa                                                 20


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gaaaagaauu uuuaaggucg cg                                              22


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ucucuuccua uaagagacca g                                               21


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ccccucugug uguuuaaguc ug                                              22


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acuaauaacg acgaucuuug uau                                             23


<210> SEQ ID NO 1196
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acuaauaacg acgaucuuug ua                                              22


<210> SEQ ID NO 1197
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accucuuucg guuguucuau uuu                                              23


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uguuucuugu acuuuuuuug uuc                                              23


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ucccguucga aaggguuuac ag                                               22


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<212> TYPE: RNA
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gguuuugaug uaugaccacc cu                                               22


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<212> TYPE: RNA
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<220> FEATURE:
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uccguuucac cacacacaca cg                                               22


<210> SEQ ID NO 1203
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aguuucucuu ucuguacugg u                                              21


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ugaaacauua ggguacuuag g                                              21


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aaaguccguc uuacuuacgu c                                              21


<210> SEQ ID NO 1206
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<212> TYPE: RNA
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<400> SEQUENCE: 1206

cuuugugucc cuugucucuu u                                              21


<210> SEQ ID NO 1207
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uuccuucuag aguaaacucc u                                              21


<210> SEQ ID NO 1208
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cuaucauuca ccuucucuac uu                                             22
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guauacuuuc uuacacguug ua                                              22


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uauuaugauc aucauuguca uu                                              22


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aacugacuuc uaggucuacu u                                               21


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<400> SEQUENCE: 1212

uuuuuacuac ugguuaagag u                                               21


<210> SEQ ID NO 1213
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auaccuuaag agagaaugac u                                               21


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<220> FEATURE:
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uuuuuuguuu cuaacucauu cu 22

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uucguugguc cucuaaccaa gu 22

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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1216

ggucuccugu ucucgagaac aa 22

<210> SEQ ID NO 1217
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<220> FEATURE:
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<400> SEQUENCE: 1217

cuuucuugua agaaaaguac ac 22

<210> SEQ ID NO 1218
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1218

gacauuacuc uuacccucug ga 22

<210> SEQ ID NO 1219
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1219

ccuuuaacac uuuuaaguua cc 22

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<212> TYPE: RNA
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<220> FEATURE:
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uccugaagcu cuuuauacaa cu                                               22


<210> SEQ ID NO 1222
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<212> TYPE: RNA
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uuuguuguau uguuguuguu auu                                              23


<210> SEQ ID NO 1223
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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<400> SEQUENCE: 1223

uuuuacgacu ccuauacccg uu                                               22


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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1224

aaagugguaa uggaagagaa gg                                               22


<210> SEQ ID NO 1225
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<212> TYPE: RNA
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<220> FEATURE:
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agaauaaaga agucucuguu ac                                               22


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<212> TYPE: RNA
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<400> SEQUENCE: 1226

ucucuuuuau gaacuuuuaa cac                                              23


<210> SEQ ID NO 1227
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<212> TYPE: RNA
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ugucuuuaca gugacucucc uc                                               22


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<210> SEQ ID NO 1229
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<212> TYPE: RNA
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cugaugucua uauguauauc ua                                               22


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<220> FEATURE:
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cuuuuuccuc ucacucucug uu                                               22


<210> SEQ ID NO 1231
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1231

aucuauauuu acacuuucua au                                               22


<210> SEQ ID NO 1232
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<212> TYPE: RNA
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<220> FEATURE:
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agucugucga cgggucuccc gu                                                22


<210> SEQ ID NO 1233
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1233

ugaaugguca gaguagaaga u                                                 21


<210> SEQ ID NO 1234
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1234

aaaagauagg gagucuuuua gg                                                22


<210> SEQ ID NO 1235
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1235

gaaacuagag cccgaacucu                                                   20


<210> SEQ ID NO 1236
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<212> TYPE: RNA
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<220> FEATURE:
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agagagacgg aacaucaacc                                                   20


<210> SEQ ID NO 1237
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<212> TYPE: RNA
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<400> SEQUENCE: 1237

auauugaaua augaagucuu                                                   20
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ucuuuaguau aguuuaggaa                                                   20


<210> SEQ ID NO 1239
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aagucugucu agucuggagu                                                   20


<210> SEQ ID NO 1240
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uuauaggucu uaccaaagac                                                   20


<210> SEQ ID NO 1241
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<212> TYPE: RNA
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<220> FEATURE:
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uucaguugua cuuuuuuugu c                                                 21


<210> SEQ ID NO 1242
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1242

acuuuuuuug uucuagaauu                                                   20


<210> SEQ ID NO 1243
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<223> OTHER INFORMATION: Antisense fragment coding sequence

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cccccccaaga aaaacuuuuu                                               20


<210> SEQ ID NO 1244
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<400> SEQUENCE: 1244

cucuaccggu uccacccucu                                                20


<210> SEQ ID NO 1245
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
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aaaaaugguu aucaucuccc                                                20


<210> SEQ ID NO 1246
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1246

cacgaggagu acuuuacaga ca                                             22


<210> SEQ ID NO 1247
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<212> TYPE: RNA
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<400> SEQUENCE: 1247

augguggaau uuauagucuc                                                20


<210> SEQ ID NO 1248
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1248

gagucgguau uuuuacuugc                                                20


<210> SEQ ID NO 1249
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<220> FEATURE:
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<400> SEQUENCE: 1249

uaacgucuuu caaagagguu uu 22

<210> SEQ ID NO 1250
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<212> TYPE: RNA
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<400> SEQUENCE: 1250

ucugaccugg ucgauaccuu ag 22

<210> SEQ ID NO 1251
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<212> TYPE: RNA
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uacauuagug gaauauguac uug 23

<210> SEQ ID NO 1252
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<400> SEQUENCE: 1252

ccuuccugaa ccauuucaag 20

<210> SEQ ID NO 1253
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<212> TYPE: RNA
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uuuaggacuc cgugaaguug ua 22

<210> SEQ ID NO 1254
<211> LENGTH: 20
<212> TYPE: RNA
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<400> SEQUENCE: 1254

cagacaguag agugaccuag 20

<210> SEQ ID NO 1255
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<212> TYPE: RNA
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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

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<210> SEQ ID NO 1256
<211> LENGTH: 20
<212> TYPE: RNA
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uuuguaacgu cuguccuauc                                                   20


<210> SEQ ID NO 1257
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<212> TYPE: RNA
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<220> FEATURE:
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<400> SEQUENCE: 1257

acauuaagau cggacucaga                                                   20


<210> SEQ ID NO 1258
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1258

gguccuuuca gaagucuccu a                                                 21


<210> SEQ ID NO 1259
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
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<400> SEQUENCE: 1259

auuuucuaga aaagaacaga                                                   20


<210> SEQ ID NO 1260
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1260

ucuguuuauu ccaguccucu                                                   20


<210> SEQ ID NO 1261
<211> LENGTH: 20
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1261

ucuguugugg gugaggaaga                                                20


<210> SEQ ID NO 1262
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1262

auccaaguuc agacggucua ugu                                            23


<210> SEQ ID NO 1263
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1263

gaauggucag aguagaagau g                                              21


<210> SEQ ID NO 1264
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1264

ccggaacgag aagucucucc                                                20


<210> SEQ ID NO 1265
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1265

guacgucgau cuugguacug                                                20


<210> SEQ ID NO 1266
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1266

ccccuucuuu ucaccauccg u                                              21
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1267

uguccuaucu cgucuaaaaa                                                   20


<210> SEQ ID NO 1268
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1268

aacuuuuacu uggaacuacu                                                   20


<210> SEQ ID NO 1269
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1269

guacucguuc uagaaacagu u                                                 21


<210> SEQ ID NO 1270
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1270

agaacacugu aaaaaugguu a                                                 21


<210> SEQ ID NO 1271
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1271

guccuugugu ucuugguuuc                                                   20


<210> SEQ ID NO 1272
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

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aaguguaauu uuuucacuau 20

<210> SEQ ID NO 1273
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1273

gacaaccuua ccgguccuac 20

<210> SEQ ID NO 1274
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1274

uuccaccucu ugagucucaa a 21

<210> SEQ ID NO 1275
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1275

cguaaaccuu ccauagaacg 20

<210> SEQ ID NO 1276
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1276

gagauaaaga acgugaacac 20

<210> SEQ ID NO 1277
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1277

uucuucucug guacacauca aua 23

<210> SEQ ID NO 1278
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

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<400> SEQUENCE: 1278

uauuacguaa accuuccaua 20

<210> SEQ ID NO 1279
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1279

gauacuucag uaguuuuaua 20

<210> SEQ ID NO 1280
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1280

aagaguaaaa acaacaaaua aa 22

<210> SEQ ID NO 1281
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1281

uauugucugg auauugaaua 20

<210> SEQ ID NO 1282
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1282

ucucucugug uuccgauucu 20

<210> SEQ ID NO 1283
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1283

aaucaggucu cucgucuuuu 20

<210> SEQ ID NO 1284
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence

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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1284

gugacggagg aagucguuag u                                               21


<210> SEQ ID NO 1285
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1285

auacuucagu aguuuuauaa                                                 20


<210> SEQ ID NO 1286
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1286

guaauuuuuu cacuaucuau                                                 20


<210> SEQ ID NO 1287
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1287

ucucucguag guuucccuca c                                               21


<210> SEQ ID NO 1288
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1288

uuuuuuacau gguccacacu                                                 20


<210> SEQ ID NO 1289
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1289

uuguacucgu ucuagaaaca                                                 20


<210> SEQ ID NO 1290
<211> LENGTH: 21
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1290

uuaguguaag aaagugggucu u                                              21


<210> SEQ ID NO 1291
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1291

ggagugagaa uaaaguaggu                                                 20


<210> SEQ ID NO 1292
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1292

guaagugaaa cauccuacga                                                 20


<210> SEQ ID NO 1293
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1293

uagucuuucc gaaauauacu g                                               21


<210> SEQ ID NO 1294
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1294

acauaaauau uuucuguucc a                                               21


<210> SEQ ID NO 1295
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1295

gaguaaaaac aacaaauaaa                                                 20
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<210> SEQ ID NO 1296
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1296

acgguucgaa cacaaguugu                                                   20


<210> SEQ ID NO 1297
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1297

acccgagacu guccuccgua c                                                 21


<210> SEQ ID NO 1298
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1298

uucaauuaau ggaaauguaa                                                   20


<210> SEQ ID NO 1299
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1299

augauacuac auagauagau                                                   20


<210> SEQ ID NO 1300
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1300

uccucccaua agaagacaua                                                   20


<210> SEQ ID NO 1301
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1301
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cuugggucuc cuugggggug                                                 20


<210> SEQ ID NO 1302
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1302

gugacggagg aagucguuag u                                               21


<210> SEQ ID NO 1303
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1303

ucucgaguuc uuccucuguu                                                 20


<210> SEQ ID NO 1304
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1304

uucuccccga ggagauacuu                                                 20


<210> SEQ ID NO 1305
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1305

agaugacgaa auccacugca                                                 20


<210> SEQ ID NO 1306
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1306

ucuacccacc uaguucucca                                                 20


<210> SEQ ID NO 1307
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence
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<400> SEQUENCE: 1307

uugccacugc uccgacuccu 20

<210> SEQ ID NO 1308
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1308

gucuccuaca uaaaagacag 20

<210> SEQ ID NO 1309
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1309

guguagguga cggaggaagu 20

<210> SEQ ID NO 1310
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1310

ucccuacaga acacuguaaa aa 22

<210> SEQ ID NO 1311
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1311

gaagucuuuc guucaguaag au 22

<210> SEQ ID NO 1312
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1312

auguagaguc gguauuuuua c 21

<210> SEQ ID NO 1313
<211> LENGTH: 22
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence

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<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1313

aaugacucac guccccggga cu                                             22


<210> SEQ ID NO 1314
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1314

aguugaaagg guugggaggu                                                20


<210> SEQ ID NO 1315
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1315

gucucccugu cccucccucc a                                              21


<210> SEQ ID NO 1316
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1316

ucagucuuga accuuacucu a                                              21


<210> SEQ ID NO 1317
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1317

aguuucuaau cucaguuguc u                                              21


<210> SEQ ID NO 1318
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1318

guacuugacc cauauguuca a                                              21


<210> SEQ ID NO 1319
<211> LENGTH: 21
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1319

gacuacugua cgaccucuuc u                                               21


<210> SEQ ID NO 1320
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1320

accagugcac aaguuagagu a                                               21


<210> SEQ ID NO 1321
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1321

aauacuucug acaaguccug a                                               21


<210> SEQ ID NO 1322
<211> LENGTH: 23
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1322

gaccaccucu auuuugcaug acu                                             23


<210> SEQ ID NO 1323
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1323

aacuaacaaa aagaguaaaa                                                 20


<210> SEQ ID NO 1324
<211> LENGTH: 21
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1324

accaaagacc ccgacacgga g                                               21
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<210> SEQ ID NO 1325
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<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1325

cucggucccg uccucugucg                                                 20


<210> SEQ ID NO 1326
<211> LENGTH: 20
<212> TYPE: RNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Antisense fragment coding sequence

<400> SEQUENCE: 1326

cccaagaaaa acuuuuuuuu                                                 20
```

1. A target sequence of an RNA virus, wherein the target sequence is a nucleic acid sequence fragment in the gene sequence in the RNA virus containing 20-40 bases and having not less than 95% similarity to human genome sequence.

2. The target sequence of the RNA virus according to claim **1**, wherein the target sequence is a nucleic acid sequence fragment in the gene sequence in the RNA virus containing 20-28 bases and having 100% similarity to human genome sequence.

3. The target sequence of the RNA virus according to claim **1**, wherein the RNA virus comprises severe acute respiratory syndrome-related coronavirus 2, severe acute respiratory syndrome-related coronavirus, middle east respiratory syndrome coronavirus, zika virus, ebola virus, HIV, norwalk virus, alkhurma virus, enterovirus, kemerovo virus, coxsackievirus, hepatitis A virus, dengue virus 2, rubella virus, marburg marburgvirus, poliovirus, respiratory syncytial virus, mumps virus, australian bat lyssavirus, andes virus, powassan virus, langat virus, eyach virus, colorado tick fever virus, lassa virus, omsk hemorrhagic fever virus, machupo virus, junin virus, guanarito virus, sin nombre virus, hantaan virus, puumala virus, dobrava virus, seoul virus, crimean-congo hemorrhagic fever virus, sabia virus, thogoto virus, black creek canal virus, european bat lyssavirus 1, european bat lyssavirus 2, chapare virus, rotavirus, tai forest ebolavirus, bundibugyo ebolavirus, rift valley fever virus, irkut virus, influenza A virus, bayou virus, kyasanur forest disease virus, black creek canal virus, japanese encephalitis virus, duvenhage lyssavirus, Lujo mammarenavirus, measles morbillivirus, tick-borne encephalitis virus, avian influenza virus, swine influenza virus and rabies virus.

4. The target sequence of the RNA virus according to claim **1**, wherein the target sequence of the RNA virus is selected from any one or more of SEQ ID NO. 1 - SEQ ID NO. 615.

5. The target sequence of the RNA virus according to claim **4**, wherein the target sequence of severe acute respiratory syndrome-related coronavirus 2 comprises SEQ ID NO. 1 - SEQ ID NO. 6; and/or, the target sequence of severe acute respiratory syndrome-related coronavirus comprises SEQ ID NO. 7 - SEQ ID NO. 9; and/or, the target sequence of middle east respiratory syndrome coronavirus comprises SEQ ID NO. 10, SEQ ID NO. 11; and/or, the target sequence of zika virus comprises SEQ ID NO. 12 - SEQ ID NO. 14; and/or, the target sequence of ebola virus comprises SEQ ID NO. 15 - SEQ ID NO. 17; and/or, the target sequence of HIV comprises SEQ ID NO. 18 - SEQ ID NO. 26; and/or, the target sequence of norwalk virus comprises SEQ ID NO. 27; and/or, the target sequence of alkhurma virus comprises SEQ ID NO. 28 - SEQ ID NO. 30; and/or, the target sequence of enterovirus comprises SEQ ID NO. 31, SEQ ID NO. 32; and/or, the target sequence of kemerovo virus comprises SEQ ID NO. 33, SEQ ID NO. 34; and/or, the target sequence of coxsackievirus comprises SEQ ID NO. 35; and/or, the target sequence of hepatitis A virus comprises SEQ ID NO. 36 - SEQ ID NO. 46; and/or, the target sequence of dengue virus 2 comprises SEQ ID NO. 47 - SEQ ID NO. 50; and/or, the target sequence of rubella virus comprises SEQ ID NO. 51; and/or, the target sequence of marburg marburgvirus comprises SEQ ID NO. 52 - SEQ ID NO. 56; and/or, the target sequence of poliovirus comprises SEQ ID NO. 57; and/or, the target sequence of respiratory syncytial virus comprises SEQ ID NO. 58 - SEQ ID NO. 85; and/or, the target sequence of mumps virus comprises SEQ ID NO. 86; and/or, the target sequence of australian bat lyssavirus comprises SEQ ID NO. 87; and/or, the target sequence of andes virus comprises SEQ ID NO. 88 - SEQ ID NO. 95; and/or, the target sequence of powassan virus comprises SEQ ID NO. 96, SEQ ID NO. 97; and/or, the target sequence of langat virus comprises SEQ ID NO. 98 - SEQ ID NO. 102; and/or, the target sequence of eyach virus comprises SEQ ID NO. 103 - SEQ ID NO. 113; and/or, the target sequence of colorado tick fever virus comprises SEQ ID NO. 114 - SEQ ID NO. 134; and/or, the target sequence of lassa virus comprises SEQ ID NO. 135, SEQ ID NO. 136; and/or, the target sequence of omsk hemorrhagic fever virus comprises SEQ ID NO. 137, SEQ ID NO. 138; and/or, the target sequence of machupo virus comprises SEQ ID NO. 139 - SEQ ID NO. 140; and/or, the target sequence of junin virus comprises SEQ ID NO. 141; and/or, the target sequence of guanarito virus comprises SEQ ID NO. 142 - SEQ ID NO.

147; and/or, the target sequence of sin nombre virus comprises SEQ ID NO. 148 - SEQ ID NO. 152; and/or, the target sequence of hantaan virus comprises SEQ ID NO. 153 - SEQ ID NO. 161; and/or, the target sequence of puumala virus comprises SEQ ID NO. 162 - SEQ ID NO. 173; and/or, the target sequence of dobrava virus comprises SEQ ID NO. 174 - SEQ ID NO. 185; and/or, the target sequence of seoul virus comprises SEQ ID NO. 186 - SEQ ID NO. 199; and/or, the target sequence of crimean-congo hemorrhagic fever virus comprises SEQ ID NO. 200 - SEQ ID NO. 204; and/or, the target sequence of sabia virus comprises SEQ ID NO. 205 - SEQ ID NO. 212; and/or, the target sequence of thogoto virus comprises SEQ ID NO. 213 - SEQ ID NO. 227; and/or, the target sequence of european bat lyssavirus 1 comprises SEQ ID NO. 228 - SEQ ID NO. 232; and/or, the target sequence of european bat lyssavirus 2 comprises SEQ ID NO. 233; and/or, the target sequence of chapare virus comprises SEQ ID NO. 234; and/or, the target sequence of rotavirus comprises SEQ ID NO. 235 - SEQ ID NO. 277; and/or, the target sequence of tai forest ebolavirus comprises SEQ ID NO. 278, SEQ ID NO. 279; and/or, the target sequence of bundibugyo ebolavirus comprises SEQ ID NO. 280; and/or, the target sequence of rift valley fever virus comprises SEQ ID NO. 281; and/or, the target sequence of irkut virus comprises SEQ ID NO. 282 - SEQ ID NO. 285; and/or, the target sequence of influenza A virus comprises SEQ ID NO. 286 - SEQ ID NO. 313; and/or, the target sequence of bayou virus comprises SEQ ID NO. 314 - SEQ ID NO. 327; and/or, the target sequence of kyasanur forest disease virus comprises SEQ ID NO. 328; and/or, the target sequence of black creek canal virus comprises SEQ ID NO. 329 - SEQ ID NO. 334; and/or, the target sequence of japanese encephalitis virus comprises SEQ ID NO. 335 - SEQ ID NO. 337; and/or, the target sequence of duvenhage lyssavirus comprises SEQ ID NO. 338 - SEQ ID NO. 344; and/or, the target sequence of Lujo mammarenavirus comprises SEQ ID NO. 345; and/or, the target sequence of measles morbillivirus comprises SEQ ID NO. 346; and/or, the target sequence of tick-borne encephalitis virus comprises SEQ ID NO. 347; and/or, the target sequence of avian influenza virus comprises SEQ ID NO. 348 - SEQ ID NO. 420; and/or, the target sequence of swine influenza virus comprises SEQ ID NO. 421 - SEQ ID NO. 521; and/or, the target sequence of rabies virus comprises SEQ ID NO. 522 - SEQ ID NO. 615.

6. A primer composition for constructing a target sequence of an RNA virus, characterized in that, the primers of the target sequence SEQ ID NO. 1 are SEQ ID NO. 616 - SEQ ID NO. 619; and/or, the primers of the target sequence SEQ ID NO. 2 are SEQ ID NO. 620 - SEQ ID NO. 623; and/or, the primers of the target sequence SEQ ID NO. 3 are SEQ ID NO. 624 - SEQ ID NO. 627; and/or, the primers of the target sequence SEQ ID NO. 4 are SEQ ID NO. 628 - SEQ ID NO. 631; and/or, the primers of the target sequence SEQ ID NO. 5 are SEQ ID NO. 632 - SEQ ID NO. 635; and/or, the primers of the target sequence SEQ ID NO. 7 are SEQ ID NO. 636 - SEQ ID NO. 639; and/or, the primers of the target sequence SEQ ID NO. 8 are SEQ ID NO. 640 - SEQ ID NO. 643; and/or, the primers of the target sequence SEQ ID NO. 10 are SEQ ID NO. 644 - SEQ ID NO. 647; and/or, the primers of the target sequence SEQ ID NO. 11 are SEQ ID NO. 648 - SEQ ID NO. 651; and/or, the primers of the target sequence SEQ ID NO. 12 are SEQ ID NO. 652 - SEQ ID NO. 655; and/or, the primers of the target sequence SEQ ID NO. 13 are SEQ ID NO. 656 - SEQ ID NO. 659; and/or, the primers of the target sequence SEQ ID NO. 14 are SEQ ID NO. 660 - SEQ ID NO. 663; and/or, the primers of the target sequence SEQ ID NO. 15 are SEQ ID NO. 664 - SEQ ID NO. 667; and/or, the primers of the target sequence SEQ ID NO. 16 are SEQ ID NO. 668 - SEQ ID NO. 671; and/or, the primers of the target sequence SEQ ID NO. 17 are SEQ ID NO. 672 - SEQ ID NO. 675; and/or, the primers of the target sequence SEQ ID NO. 18 are SEQ ID NO. 676 - SEQ ID NO. 679; and/or, the primers of the target sequence SEQ ID NO. 19 are SEQ ID NO. 680 - SEQ ID NO. 683; and/or, the primers of the target sequence SEQ ID NO. 20 are SEQ ID NO. 684 - SEQ ID NO. 687; and/or, the primers of the target sequence SEQ ID NO. 21 are SEQ ID NO. 688 - SEQ ID NO. 691; and/or, the primers of the target sequence SEQ ID NO. 22 are SEQ ID NO. 692 - SEQ ID NO. 695; and/or, the primers of the target sequence SEQ ID NO. 23 are SEQ ID NO. 696 - SEQ ID NO. 699; and/or, the primers of the target sequence SEQ ID NO. 24 are SEQ ID NO. 700 - SEQ ID NO. 703; and/or, the primers of the target sequence SEQ ID NO. 25 are SEQ ID NO. 704 - SEQ ID NO. 707; and/or, the primers of the target sequence SEQ ID NO. 26 are SEQ ID NO. 708 - SEQ ID NO. 711.

7. An RNA drug against a virus, wherein the RNA drug comprises the reverse complementary sequence of the target sequence of the RNA virus according to claim **1**, cholesterol modification and four phosphorothioate backbone modifications are made at the 3′ end of the reverse complementary sequence of the target sequence of the RNA virus, two phosphorothioate backbone modifications are made at the 5′ end, and methoxy modification is made on the whole chain, or, cholesterol modification and four phosphorothioate backbone modifications are made at the 3′ end of the target sequence of the RNA virus, or two phosphorothioate backbone modifications are made at the 5′ end, and methoxy modification is made on the whole chain.

8. The RNA drug according to claim **7**, wherein the reverse complementary sequence of the target sequence of the RNA virus comprises reverse complementary RNA sequence or reverse complementary DNA sequence.

9. The RNA drug according to claim **7**, further comprising a pharmaceutically acceptable carrier or excipient.

10. The RNA drug against the virus according to claim **7**, wherein the dosage form of the RNA drug comprises powder, tablet, granule, capsule, solution, aerosol, injection, emulsion or suspension.

11. A biomaterial related to the target sequence of the RNA virus according to claim **1**, wherein the biomaterial is :

A) a DNA and/or RNA molecule that is complementary and paired to the target sequence of the RNA virus according to claim **1**; or

B) an expression cassette, a recombinant vector, a recombinant microorganism, a recombinant cell line containing the target sequence of the RNA virus according to claim **1** or the DNA molecule in A).

12. The biomaterial according to claim **11**, wherein the biomaterial is a recombinant vector, and whose construction steps comprise: 1) designing a primer, and amplifying the target sequence of the RNA virus by PCR; 2) digesting the amplified sequence fragment and an expression vector, and ligating a sequence fragment of interest and the expression vector; 3) transferring the ligated product into *Escherichia coli* and cultivating the *Escherichia coli*; and 4) after identification, extracting recombinant plasmid and packaging the recombinant plasmid.

13. The biomaterial according to claim **11**, wherein the recombinant vector has target sequences expressing severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2), severe acute respiratory syndrome-related coronavirus (SARS-CoV), or middle east respiratory syndrome coronavirus (MERS-CoV).

14. A method of preventing or treating a condition caused by the RNA virus comprising administering the RNA virus according to claim **1** to a subject in need thereof.

15. The method according to claim **14**, wherein the condition comprise a human disease, an animal disease and zoonosis.

16. The method according to claim **14**, wherein the RNA virus is administered as a vaccine and an effective substance that regulates the target sequence is directly screened; alternatively, according to the effect of the gene regulated by the target sequence, an effective substance against the gene and gene product regulated by the target sequence is screened.

17. The method according to claim **14**, wherein the target sequence is knocked out.

18. The method according to claim **17**, wherein the method for knocking out the target sequence comprises: CRISPR system and/or ribozyme technology.

19. The method according to claim **16**, wherein the vaccine is a live attenuated vaccine.

20. A live attenuated vaccine, wherein the target sequence of the RNA virus according to claim **1** is deleted or mutated in the whole genome of the live attenuated vaccine.

21. A method of activating related genes at the cellular level and screening therapeutic drugs against the related genes comprising contacting the RNA virus according to claim **1** to genes.

22. The method according to claim **21**, wherein the RNA virus is a coronavirus, and the related genes comprise ACE2 gene, the coding genes of the hyaluronic acid synthase family HAS1, HAS2, and HAS3, and/or genes within 200 k around the fragment.

23. (canceled)

24. A method of identifying drug targets against diseases caused by an RNA virus comprising analyzing the target sequence of the RNA virus according to claim **1** which is found in the cells of the diseases caused by the RNA virus, and the drug targets are found within 200 k around the target sequence of the RNA virus or the drug targets are found beyond 200 k using the prediction software blast 2.2.30 or bedtools 2.29.2.

25. The method according to claim **23**, wherein the drug comprises a miRNA antagonist.

26. A method for detecting a virus, comprising detecting the target sequence of the RNA virus according to of claim **1**.

27. The method according to claim **26**, wherein the detection of the target sequence comprises PCR amplification and nucleotide sequencing.

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