SEQUENCE LISTING

<110> Benitec Biopharma Limited

<120> Reagents for treatment of hepatitis B virus (HBV) infection and use thereof

<130> 177887

<150> US 62/332,245
<151> 2016-05-05

<160> 229

<170> PatentIn version 3.5

<210> 1
<211> 20
<212> RNA
<213> Hepatitis B virus Region 1 transcript

<400> 1
cauccugcug cuaugccuca 20

<210> 2
<211> 23
<212> RNA
<213> Hepatitis B virus Region 2 transcript

<400> 2
uuugcugacg caacccccac ugg 23

<210> 3
<211> 20
<212> RNA
<213> Hepatitis B virus Region 3 transcript

<400> 3
aagccuccaa gcugugccuu 20

<210> 4
<211> 28
<212> RNA
<213> Hepatitis B virus Region 4 transcript

<400> 4
gcaggucccc uagaagaaga acucccuc 28

<210> 5
<211> 23

<212> RNA
<213> Hepatitis B virus Region 5 transcript

<400> 5
caagguaugu ugcccguuug ucc 23

<210> 6
<211> 20
<212> RNA
<213> Hepatitis B virus Region 6 transcript

<400> 6
cucguggugg acuucucuca 20

<210> 7
<211> 23
<212> RNA
<213> Hepatitis B virus Region 7 transcript

<400> 7
cucguguuac aggcgggguu uuu 23

<210> 8
<211> 29
<212> RNA
<213> Hepatitis B virus Region 8 transcript

<400> 8
ccgugugcac uucgcuucac cucugcacg 29

<210> 9
<211> 22
<212> RNA
<213> Hepatitis B virus Region 9 transcript

<400> 9
uacgucccgu cggcgcugaa uc 22

<210> 10
<211> 19
<212> RNA
<213> Hepatitis B virus Region 10 transcript

<400> 10
aaaugccccu aucuuauca 19

<210> 11
<211> 21

<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-1 effector

<400> 11
ugaggcauag cagcaggaug c 21

<210> 12
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-1 effector complement

<400> 12
cauccugcug cuaugccuca 20

<210> 13
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-2 effector

<400> 13
caguggggu ugcgucagca a 21

<210> 14
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-2 effector complement

<400> 14
ugcugacgca acccccacug 20

<210> 15
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-3 effector

<400> 15
aaggcacagc uuggaggcuu g 21

<210> 16
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-3 effector complement

<400> 16
aagccuccaa gcugugccuu 20

<210> 17
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-4 effector

<400> 17
gaguucuucu ucuaggggac c 21

<210> 18
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-4 effector complement

<400> 18
gucccuaga agaagaacuc 20

<210> 19
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-5 effector

<400> 19
gagggaguuc uucuucuagg g 21

<210> 20
<211> 20

<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-5 effector complement

<400> 20
ccuagaagaa gaacucccuc 20

<210> 21
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-6 effector

<400> 21
uucuucuucu aggggaccug c 21

<210> 22
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-6 effector complement

<400> 22
caggucccu agaagaagaa 20

<210> 23
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-7 effector

<400> 23
acaaacgggc aacauaccuu g 21

<210> 24
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-7 effector complement

<400> 24
aagguauguu gcccguuugu 20

<210> 25
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-8 effector

<400> 25
uugagagaag uccaccacga g 21

<210> 26
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-8 effector complement

<400> 26
ucguggugga cuucucucaa 20

<210> 27
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-9 effector

<400> 27
aaaccccgcc uguaacacga g 21

<210> 28
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-9 effector complement

<400> 28
ucguguuaca ggcgggguuu 20

<210> 29
<211> 21

<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-10 effector

<400> 29
ugcagaggug aagcgaagug c 21

<210> 30
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-10 effector complement

<400> 30
cacuucgcuu caccucugca 20

<210> 31
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-11 effector

<400> 31
gauucagcgc cgacgggacg a 21

<210> 32
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-11 effector complement

<400> 32
cgucccgucg gcgcugaauc 20

<210> 33
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-12 effector

<400> 33
ggauucagcg ccgacgggac g 21

<210> 34
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-12 effector complement

<400> 34
gucccgucgg cgcugaaucc 20

<210> 35
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-13 effector

<400> 35
ugauaagaua ggggcauuug g 21

<210> 36
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-13 effector complement

<400> 36
caaaugcccc uaucuuauca 20

<210> 37
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-14 effector

<400> 37
ugaggcccac ucccauaggu a 21

<210> 38
<211> 20

<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-14 effector complement

<400> 38
accuauggga gugggccuca 20

<210> 39
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-15 effector

<400> 39
ggaaagcccu acgaaccacu g 21

<210> 40
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-15 effector complement

<400> 40
agugguucgu agggcuuucc 20

<210> 41
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-16 effector

<400> 41
gggcaacggg guaaagguuc a 21

<210> 42
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-16 effector complement

<400> 42
gaaccuuuac cccguugccc 20

<210> 43
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-1 sequence

<400> 43
gguauauugc uguugacagu gagcgacauc cugcugcuau gccucaacug ugaagcagau 60

ggguugaggc auagcagcag gaugccgccu acugccucgg acuucaa 107

<210> 44
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-2 sequence

<400> 44
gguauauugc uguugacagu gagcgaugcu gacgcaaccc ccacugacug ugaagcagau 60

gggucagugg ggguugcguc agcaacgccu acugccucgg acuucaa 107

<210> 45
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-3 sequence

<400> 45
gguauauugc uguugacagu gagcgaaagc cuccaagcug ugccuuacug ugaagcagau 60

ggguaaggca cagcuuggag gcuugcgccu acugccucgg acuucaa 107

<210> 46
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-4 sequence

<400> 46
gguauauugc uguugacagu gagcgagucc ccuagaagaa gaacucacug ugaagcagau 60

gggugaguuc uucuucuagg ggacccgccu acugccucgg acuucaa 107

<210> 47
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-5 sequence

<400> 47
gguauauugc uguugacagu gagcgaccua gaagaagaac ucccucacug ugaagcagau 60

gggugaggga guucuucuuc uagggcgccu acugccucgg acuucaa 107

<210> 48
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-6 sequence

<400> 48
gguauauugc uguugacagu gagcgacagg uccccuagaa gaagaaacug ugaagcagau 60

gggguuucuuc uucuagggga ccugccgccu acugccucgg acuucaa 107

<210> 49
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-7 sequence

<400> 49
gguauauugc uguugacagu gagcgaaagg uauguugccc guuuguacug ugaagcagau 60

ggguacaaac gggcaacaua ccuugcgccu acugccucgg acuucaa 107

<210> 50
<211> 107
<212> RNA
<213> Artificial Sequence

<220>

<223> shmiR-8 sequence

<400> 50
gguauauugc uguugacagu gagcgaucgu gguggacuuc ucucaaacug ugaagcagau 60

ggguuugaga gaaguccacc acgagcgccu acugccucgg acuucaa 107

<210> 51
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-9 sequence

<400> 51
gguauauugc uguugacagu gagcgaucgu guuacaggcg ggguuuacug ugaagcagau 60

ggguaaaccc cgccuguaac acgagcgccu acugccucgg acuucaa 107

<210> 52
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-10 sequence

<400> 52
gguauauugc uguugacagu gagcgacacu ucgcuucacc ucugcaacug ugaagcagau 60

ggguugcaga ggugaagcga agugccgccu acugccucgg acuucaa 107

<210> 53
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-11 sequence

<400> 53
gguauauugc uguugacagu gagcgacguc ccgucggcgc ugaaucacug ugaagcagau 60

gggugauuca gcgccgacgg gacgacgccu acugccucgg acuucaa 107

<210> 54
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-12 sequence

<400> 54
gguauauugc uguugacagu gagcgagucc cgucggcgcu gaauccacug ugaagcagau 60

ggguggauuc agcgccgacg ggacgcgccu acugccucgg acuucaa 107

<210> 55
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-13 sequence

<400> 55
gguauauugc uguugacagu gagcgacaaa ugccccuauc uuaucaacug ugaagcagau 60

ggguugauaa gauaggggca uuuggcgccu acugccucgg acuucaa 107

<210> 56
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-14 sequence

<400> 56
gguauauugc uguugacagu gagcgaaccu augggagugg gccucaacug ugaagcagau 60

ggguugaggc ccacucccau agguacgccu acugccucgg acuucaa 107

<210> 57
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-15 sequence

<400> 57
gguauauugc uguugacagu gagcgaagug guucguaggg cuuuccacug ugaagcagau 60

ggguggaaag cccuacgaac cacugcgccu acugccucgg acuucaa 107

<210> 58
<211> 107

<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-16 sequence

<400> 58
gguauauugc uguugacagu gagcgagaac cuuuaccccg uugcccacug ugaagcagau 60

gggugggcaa cgggguaaag guucacgccu acugccucgg acuucaa 107

<210> 59
<211> 81
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-1

<400> 59
ggaagcggac aggagcgaca ccgcgcagcc caacggaagc agaggggagg caagcagcag 60

gagccgccac gcccggacca a 81

<210> 60
<211> 83
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-2

<400> 60
ggaagcggac aggagcgagc gacgcaaccc ccacgacgga agcagagggc agggggggcg 60

cagcaacgcc acgcccggac caa 83

<210> 61
<211> 81
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-3

<400> 61
ggaagcggac aggagcgaaa gccccaagcg gccacggaag cagagggaag gcacagcgga 60

ggcgcgccac gcccggacca a 81

<210> 62
<211> 80
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-4

<400> 62
ggaagcggac aggagcgagc cccagaagaa gaaccacgga agcagagggg agcccagggg 60

acccgccacg cccggaccaa 80

<210> 63
<211> 80
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-5

<400> 63
ggaagcggac aggagcgacc agaagaagaa cccccacgga agcagagggg agggagccca 60

gggcgccacg cccggaccaa 80

<210> 64
<211> 80
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-6

<400> 64
ggaagcggac aggagcgaca ggccccagaa gaagaaacgg aagcagaggg cccaggggac 60

cgccgccacg cccggaccaa 80

<210> 65
<211> 79
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-7

<400> 65
ggaagcggac aggagcgaaa ggaggcccgg acggaagcag agggacaaac gggcaacaac 60

cgcgccacgc ccggaccaa 79

<210> 66
<211> 80
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-8

<400> 66
ggaagcggac aggagcgacg ggggacccca aacggaagca gaggggagag aagccaccac 60

gagcgccacg cccggaccaa 80

<210> 67
<211> 81
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-9

<400> 67
ggaagcggac aggagcgacg gacaggcggg gacggaagca gagggaaacc ccgccgaaca 60

cgagcgccac gcccggacca a 81

<210> 68
<211> 81
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-10

<400> 68
ggaagcggac aggagcgaca ccgccacccg caacggaagc agaggggcag agggaagcga 60

aggccgccac gcccggacca a 81

<210> 69
<211> 84
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-11

<400> 69
ggaagcggac aggagcgacg cccgcggcgc gaacacggaa gcagagggga cagcgccgac 60

gggacgacgc cacgcccgga ccaa 84

<210> 70
<211> 84
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-12

<400> 70
ggaagcggac aggagcgagc ccgcggcgcg aaccacggaa gcagaggggg acagcgccga 60

cgggacgcgc cacgcccgga ccaa 84

<210> 71
<211> 78
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-13

<400> 71
ggaagcggac aggagcgaca aagccccaca caacggaagc agaggggaaa gaaggggcag 60

gcgccacgcc cggaccaa 78

<210> 72
<211> 82
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-14

<400> 72
ggaagcggac aggagcgaac cagggagggg cccaacggaa gcagagggga ggcccacccc 60

aaggacgcca cgcccggacc aa 82

<210> 73
<211> 81
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-15

<400> 73
ggaagcggac aggagcgaag ggcgagggcc cacggaagca gaggggaaa gcccacgaac 60

cacgcgccac gcccggacca a 81

<210> 74
<211> 82
<212> RNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-16

<400> 74
ggaagcggac aggagcgaga accaccccgg cccacggaag cagaggggg caacggggaa 60

aggcacgcca cgcccggacc aa 82

<210> 75
<211> 18
<212> RNA
<213> Artificial Sequence

<220>
<223> Stemloop

<400> 75
acugugaagc agaugggu 18

<210> 76
<211> 26
<212> RNA
<213> Artificial Sequence

<220>
<223> miR-30a backbone 5' flanking sequnece

<400> 76
gguauauugc uguugacagu gagcga 26

<210> 77
<211> 22
<212> RNA
<213> Artificial Sequence

<220>
<223> miR-30a backbone 3' flanking sequnece

<400> 77
cgccuacugc cucggacuuc aa 22

<210> 78
<211> 47
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-1 sequence

<400> 78
cauccugcug cuaugccuca caagagauga ggcauagcag caggaug 47

<210> 79
<211> 47
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-2 sequence

<400> 79
gcugacgcaa cccccacugg caagagacca gugggggguug cgucagc 47

<210> 80
<211> 47
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-3 sequence

<400> 80
aagccuccaa gcugugccuu ugugcuuaag gcacagcuug gaggcuu 47

<210> 81
<211> 49
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-4 sequence

<400> 81
ggucccuag aagaagaacu ccaagagaga guucuucuuc uaggggacc 49

<210> 82
<211> 49
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-5 sequence

<400> 82
cccuagaaga agaacucccu ccaagagaga gggaguucuu cuucuaggg 49

<210> 83
<211> 49
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-6 sequence

<400> 83
gcaggucccc uagaagaaga acaagagauu cuucuucuag gggaccugc 49

<210> 84
<211> 49
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-7 sequence

<400> 84
caagguaugu ugcccguuug ucaagagaac aaacgggcaa cauaccuug 49

<210> 85
<211> 47
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-8 sequence

<400> 85
cucguggugg acuucucuca caagagauga gagaagucca ccacgag 47

<210> 86
<211> 49
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-9 sequence

<400> 86
cucguguuac aggcgggguu uugugcuuaa accccgccug uaacacgag 49

<210> 87
<211> 49
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-10 sequence

<400> 87
gcacuucgcu ucaccucugc acaagagaug cagaggugaa gcgaagugc 49

<210> 88
<211> 49
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-11 sequence

<400> 88
acgucccguc ggcgcugaau cugugcuuga uucagcgccg acgggacgu 49

<210> 89
<211> 49
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-12 sequence

<400> 89
cgucccgucg gcgcugaauc cugugcuugg auucagcgcc gacgggacg 49

<210> 90
<211> 45
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-13 sequence

<400> 90
aaaugccccu aucuuaucau gugcuuugau aagauagggg cauuu 45

<210> 91
<211> 51
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-14 sequence

<400> 91
auaccuaugg gagugggccu cacaagagau gaggcccacu cccauaggua u 51

<210> 92
<211> 51
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-15 sequence

<400> 92
cagugguucg uagggcuuuc cccaagagag ggaaagcccu acgaaccacu g 51

<210> 93
<211> 51
<212> RNA
<213> Artificial Sequence

<220>
<223> shRNA-16 sequence

<400> 93
gaaccuuuac cccguugccc ggcaagagac cgggcaacgg gguaaagguu c 51

<210> 94
<211> 47
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-1

<400> 94
catcctgctg ctatgcctca caagagatga ggcatagcag caggatg 47

<210> 95
<211> 47
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-2

<400> 95
gctgacgcaa cccccactgg caagagacca gtgggggttg cgtcagc 47

<210> 96
<211> 47
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-3

<400> 96
aagcctccaa gctgtgcctt tgtgcttaag gcacagcttg gaggctt 47

<210> 97
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-4

<400> 97
ggtcccctag aagaagaact ccaagagaga gttcttcttc taggggacc 49

<210> 98
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-5

<400> 98
ccctagaaga agaactccct ccaagagaga gggagttctt cttctaggg 49

<210> 99
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-6

<400> 99
gcaggtcccc tagaagaaga acaagagatt cttcttctag gggacctgc 49

<210> 100
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-7

<400> 100
caaggtatgt tgcccgtttg tcaagagaac aaacgggcaa cataccttg 49

<210> 101
<211> 47
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-8

<400> 101
ctcgtggtgg acttctctca caagagatga gagaagtcca ccacgag 47

<210> 102
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-9

<400> 102
ctcgtgttac aggcggggtt ttgtgcttaa accccgcctg taacacgag 49

<210> 103
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-10

<400> 103
gcacttcgct tcacctctgc acaagagatg cagaggtgaa gcgaagtgc 49

<210> 104
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-11

<400> 104
acgtcccgtc ggcgctgaat ctgtgcttga ttcagcgccg acgggacgt 49

<210> 105
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-12

<400> 105
cgtcccgtcg gcgctgaatc ctgtgcttgg attcagcgcc gacgggacg 49

<210> 106
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-13

<400> 106
aaatgcccct atcttatcat gtgctttgat aagatagggg cattt 45

<210> 107
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-14

<400> 107
atacctatgg gagtgggcct cacaagagat gaggcccact cccataggta t 51

<210> 108
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-15

<400> 108
cagtggttcg tagggctttc cccaagagag ggaaagccct acgaaccact g 51

<210> 109
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shRNA-16

<400> 109
gaacctttac cccgttgccc ggcaagagac cgggcaacgg ggtaaaggtt c 51

<210> 110
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-17 effector

<400> 110
gggaaagccc uacgaaccac a 21

<210> 111
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-17 effector complement

<400> 111
gugguucgua gggcuuuccc 20

<210> 112
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-18 effector

<400> 112
ggggaaagcc cuacgaacca c 21

<210> 113
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-18 effector complement

<400> 113
ugguucguag ggcuuucccc 20

<210> 114
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-19 effector

<400> 114
uggaaagccc uacgaaccac a 21

<210> 115
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-19 effector complement

<400> 115
gugguucgua gggcuuucca 20

<210> 116
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-20 effector

<400> 116
gaaagcccua cgaaccacug a 21

<210> 117
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-20 effector complement

<400> 117
cagugguucg uagggcuuuc 20

<210> 118
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-21 effector

<400> 118
aaagcccuac gaaccacuga a 21

<210> 119
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-21 effector complement

<400> 119
ucagugguuc guagggcuuu 20

<210> 120
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-22 effector

<400> 120
aaagcccuac gaaccacugc a 21

<210> 121
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-22 effector complement

<400> 121
gcagugguuc guagggcuuu 20

<210> 122
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-23 effector

<400> 122
gggauucagc gccgacggga c 21

<210> 123
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-23 effector complement

<400> 123
ucccgucggc gcugaauccc 20

<210> 124
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-24 effector

<400> 124
cgggauucag cgccgacggg a 21

<210> 125
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-24 effector complement

<400> 125
cccgucggcg cugaaucccg 20

<210> 126
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-25 effector

<400> 126
uggauucagc gccgacggga c 21

<210> 127
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-25 effector complement

<400> 127
ucccgucggc gcugaaucca 20

<210> 128
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-26 effector

<400> 128
gauucagcgc cgacgggacg a 21

<210> 129
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-26 effector complement

<400> 129
cgucccgucg gcgcugaauc 20

<210> 130
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-27 effector

<400> 130
auucagcgcc gacgggacgu a 21

<210> 131
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-27 effector complement

<400> 131
acgucccguc ggcgcugaau 20

<210> 132
<211> 21
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-28 effector

<400> 132
auucagcgcc gacgggacgc a 21

<210> 133
<211> 20
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-28 effector complement

<400> 133
gcgucccguc ggcgcugaau 20

<210> 134
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-17 sequence

<400> 134
gguauauugc uguugacagu gagcgagugg uucguagggc uuucccacug ugaagcagau 60

gggugggaaa gcccuacgaa ccacacgccu acugccucgg acuucaa 107

<210> 135
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-18 sequence

<400> 135
gguauauugc uguugacagu gagcgauggu ucguagggcu uuccccacug ugaagcagau 60

gggugggggaa agcccuacga accaccgccu acugccucgg acuucaa 107

<210> 136
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-19 sequence

<400> 136
gguauauugc uguugacagu gagcgagugg uucguagggc uuuccaacug ugaagcagau 60

ggguuggaaa gcccuacgaa ccacacgccu acugccucgg acuucaa 107

<210> 137
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-20 sequence

<400> 137
gguauauugc uguugacagu gagcgacagu gguucguagg gcuuucacug ugaagcagau 60

gggugaaagc ccuacgaacc acugacgccu acugccucgg acuucaa 107

<210> 138
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-21 sequence

<400> 138
gguauauugc uguugacagu gagcgaucag ugguucguag ggcuuuacug ugaagcagau 60

ggguaaagcc cuacgaacca cugaacgccu acugccucgg acuucaa 107

<210> 139
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-22 sequence

<400> 139
gguauauugc uguugacagu gagcgagcag ugguucguag ggcuuuacug ugaagcagau 60

ggguaaagcc cuacgaacca cugcacgccu acugccucgg acuucaa 107

<210> 140
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-23 sequence

<400> 140
gguauauugc uguugacagu gagcgauccc gucggcgcug aaucccacug ugaagcagau 60

gggugggauu cagcgccgac gggaccgccu acugccucgg acuucaa 107

<210> 141
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-24 sequence

<400> 141
gguauauugc uguugacagu gagcgacccg ucggcgcuga aucccgacug ugaagcagau 60

gggucgggau ucagcgccga cgggacgccu acugccucgg acuucaa 107

<210> 142
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-25 sequence

<400> 142
gguauauugc uguugacagu gagcgauccc gucggcgcug aauccaacug ugaagcagau 60

gggguuggauu cagcgccgac gggaccgccu acugccucgg acuucaa 107

<210> 143
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-26 sequence

<400> 143
gguauauugc uguugacagu gagcgacguc ccgucggcgc ugaaucacug ugaagcagau 60

gggugauuca gcgccgacgg gacgacgccu acugccucgg acuucaa 107

<210> 144
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-27 sequence

<400> 144
gguauauugc uguugacagu gagcgaacgu cccgucggcg cugaauacug ugaagcagau 60

ggguauucag cgccgacggg acguacgccu acugccucgg acuucaa 107

<210> 145
<211> 107
<212> RNA
<213> Artificial Sequence

<220>
<223> shmiR-28 sequence

<400> 145
gguauauugc uguugacagu gagcgagcgu cccgucggcg cugaauacug ugaagcagau 60

ggguauucag cgccgacggg acgcacgccu acugccucgg acuucaa 107

<210> 146
<211> 107
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-17

<400> 146
ggtatattgc tgttgacagt gagcgagtgg ttcgtagggc tttcccactg tgaagcagat 60

gggtgggaaa gccctacgaa ccacacgcct actgcctcgg acttcaa 107

<210> 147
<211> 107
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-18

<400> 147
ggtatattgc tgttgacagt gagcgatggt tcgtagggct ttccccactg tgaagcagat 60

gggtggggaa agccctacga accaccgcct actgcctcgg acttcaa 107

<210> 148
<211> 107
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-19

<400> 148
ggtatattgc tgttgacagt gagcgagtgg ttcgtagggc tttccaactg tgaagcagat 60

gggttggaaa gccctacgaa ccacacgcct actgcctcgg acttcaa 107

<210> 149
<211> 107
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-20

<400> 149
ggtatattgc tgttgacagt gagcgacagt ggttcgtagg gctttcactg tgaagcagat 60

gggtgaaagc cctacgaacc actgacgcct actgcctcgg acttcaa 107

<210> 150
<211> 107
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-21

<400> 150
ggtatattgc tgttgacagt gagcgatcag tggttcgtag ggctttactg tgaagcagat 60

gggtaaagcc ctacgaacca ctgaacgcct actgcctcgg acttcaa 107

<210> 151
<211> 107
<212> DNA
<213> Artificial Sequence

<220>

<223> DNA sequence coding for shmiR-22

<400> 151
ggtatattgc tgttgacagt gagcgagcag tggttcgtag ggctttactg tgaagcagat 60

gggtaaagcc ctacgaacca ctgcacgcct actgcctcgg acttcaa 107

<210> 152
<211> 107
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-23

<400> 152
ggtatattgc tgttgacagt gagcgatccc gtcggcgctg aatcccactg tgaagcagat 60

gggtgggatt cagcgccgac gggaccgcct actgcctcgg acttcaa 107

<210> 153
<211> 107
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-24

<400> 153
ggtatattgc tgttgacagt gagcgacccg tcggcgctga atcccgactg tgaagcagat 60

gggtcgggat tcagcgccga cgggacgcct actgcctcgg acttcaa 107

<210> 154
<211> 107
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-25

<400> 154
ggtatattgc tgttgacagt gagcgatccc gtcggcgctg aatccaactg tgaagcagat 60

gggttggatt cagcgccgac gggaccgcct actgcctcgg acttcaa 107

<210> 155
<211> 107
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-26

<400> 155
ggtatattgc tgttgacagt gagcgacgtc ccgtcggcgc tgaatcactg tgaagcagat 60

gggtgattca gcgccgacgg gacgacgcct actgcctcgg acttcaa 107

<210> 156
<211> 107
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-27

<400> 156
ggtatattgc tgttgacagt gagcgaacgt cccgtcggcg ctgaatactg tgaagcagat 60

gggtattcag cgccgacggg acgtacgcct actgcctcgg acttcaa 107

<210> 157
<211> 107
<212> DNA
<213> Artificial Sequence

<220>
<223> DNA sequence coding for shmiR-28

<400> 157
ggtatattgc tgttgacagt gagcgagcgt cccgtcggcg ctgaatactg tgaagcagat 60

gggtattcag cgccgacggg acgcacgcct actgcctcgg acttcaa 107

<210> 158
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> HBV forward primer

<400> 158
cacatcagga ttcctaggac c 21

<210> 159
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> HBV reverse primer

<400> 159
aggttggtga gtgattggag 20

<210> 160
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> HBV TaqMan probe

<400> 160
cagagtctag actcgtggtg gacttc 26

<210> 161
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> HBV cccDNA forward primer

<400> 161
ctccccgtct gtgccttct 19

<210> 162
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> HBV cccDNA reverse primer

<400> 162
gccccaaagc cacccaag 18

<210> 163
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> HBV cccDNA TaqMan probe

<400> 163
cgtcgcatgg araccaccgt gaacgcc 27

<210> 164
<211> 69
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-6 DNA sequence with flanking region

<400> 164
caacggatcc gcaggtcccc tagaagaaga acaagagatt cttcttctag gggacctgct 60

ttttagat 69

<210> 165
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-6 effector species 1

<400> 165
ttcttctagg ggacct 16

<210> 166
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-6 effector species 2

<400> 166
ttcttctagg ggacctg 17

<210> 167
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-6 effector species 3

<400> 167
ttcttctagg ggacctgc 18

<210> 168
<211> 19

<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-6 effector species 4

<400> 168
ttcttctagg ggacctgct 19

<210> 169
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-6 effector species 5

<400> 169
ttcttctagg ggacctgctt 20

<210> 170
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-6 effector species 6

<400> 170
ttcttctagg ggacctgctt t 21

<210> 171
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-6 effector species 7

<400> 171
cttcttctag gggacctg 18

<210> 172
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-6 effector species 8

<400> 172
cttcttctag gggacctgc 19

<210> 173
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-6 effector species 9

<400> 173
cttcttctag gggacctgct 20

<210> 174
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-6 effector species 10

<400> 174
cttcttctag gggacctgct t 21

<210> 175
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-6 effector species 11

<400> 175
cttcttctag gggacctgct tt 22

<210> 176
<211> 80
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-6 DNA sequence with flanking region

<400> 176
ttgacagtga gcgacaggtc ccctagaaga agaaactgtg aagcagatgg gtttcttctt 60

ctaggggacc tgccgcctac 80

<210> 177
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-6 effector species 1

<400> 177
ttcttctagg ggacctgc 18

<210> 178
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-6 effector species 2

<400> 178
cttcttctag gggacctgc 19

<210> 179
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-6 effector species 3

<400> 179
tttcttcttc taggggacct g 21

<210> 180
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-6 effector species 4

<400> 180
tttcttcttc taggggacct gc 22

<210> 181
<211> 23
<212> DNA
<213> Artificial Sequence

<220>

<223> shmiR-6 effector species 5

<400> 181
tttcttcttc taggggacct gcc 23

<210> 182
<211> 75
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 DNA sequence plus flanking region

<400> 182
gaaaggacga ggatccgcag tggttcgtag ggctttcccc aagagaggga aagccctacg 60

aaccactgtt tttct 75

<210> 183
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 1

<400> 183
agccctacga accactgttt 20

<210> 184
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 2

<400> 184
agccctacga accactgttt t 21

<210> 185
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 3

<400> 185
aagccctacg aaccactgt 19

<210> 186
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 4

<400> 186
aagccctacg aaccactgtt 20

<210> 187
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 5

<400> 187
aagccctacg aaccactgtt t 21

<210> 188
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 6

<400> 188
aagccctacg aaccactgtt tt 22

<210> 189
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 7

<400> 189
aaagccctac gaaccactg 19

<210> 190
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 8

<400> 190
aaagccctac gaaccactgt 20

<210> 191
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 9

<400> 191
aaagccctac gaaccactgt t 21

<210> 192
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 10

<400> 192
aaagccctac gaaccactgt tt 22

<210> 193
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 11

<400> 193
aaagccctac gaaccactgt ttt 23

<210> 194
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 12

<400> 194
gaaagcccta cgaaccactg 20

<210> 195
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 13

<400> 195
gaaagcccta cgaaccactg t 21

<210> 196
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 14

<400> 196
gaaagcccta cgaaccactg tt 22

<210> 197
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 15

<400> 197
gaaagcccta cgaaccactg ttt 23

<210> 198
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 16

<400> 198
gaaagcccta cgaaccactg tttt 24

<210> 199
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 17

<400> 199
ggaaagccct acgaaccact 20

<210> 200
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 18

<400> 200
ggaaagccct acgaaccact g 21

<210> 201
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-15 effector species 19

<400> 201
ggaaagccct acgaaccact gt 22

<210> 202
<211> 81
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-15 DNA sequence plus flanking region

<400> 202
gttgacagtg agcgaagtgg ttcgtagggc tttccactgt gaagcagatg ggtggaaagc 60

cctacgaacc actgcgccta c 81

<210> 203
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-15 effector species 1

<400> 203
gaaagcccta cgaaccactg 20

<210> 204
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-15 effector species 2

<400> 204
ggaaagccct acgaaccact g 21

<210> 205
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-15 effector species 3

<400> 205
tggaaagccc tacgaaccac 20

<210> 206
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-15 effector species 4

<400> 206
tggaaagccc tacgaaccac t 21

<210> 207
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-15 effector species 5

<400> 207
tggaaagccc tacgaaccac tg 22

<210> 208
<211> 23

<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-15 effector species 6

<400> 208
tggaaagccc tacgaaccac tgc 23

<210> 209
<211> 69
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-12 DNA sequence plus flanking region

<400> 209
ctcaacggat ccgcgtcccg tcggcgctga atcctgtgct tggattcagc gccgacggga 60

cgttttttc 69

<210> 210
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-12 effector species 1

<400> 210
ttcagcgccg acgggac 17

<210> 211
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-12 effector species 2

<400> 211
ttcagcgccg acgggacg 18

<210> 212
<211> 19
<212> DNA
<213> Artificial Sequence

<220>

<223> shRNA-12 effector species 3

<400> 212
ttcagcgccg acgggacgt 19

<210> 213
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-12 effector species 4

<400> 213
ttcagcgccg acgggacgtt 20

<210> 214
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-12 effector species 5

<400> 214
ttcagcgccg acgggacgtt t 21

<210> 215
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-12 effector species 6

<400> 215
ttcagcgccg acgggacgtt tt 22

<210> 216
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-12 effector species 7

<400> 216
attcagcgcc gacggga 17

<210> 217
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-12 effector species 8

<400> 217
attcagcgcc gacgggac 18

<210> 218
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-12 effector species 9

<400> 218
attcagcgcc gacgggacg 19

<210> 219
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-12 effector species 10

<400> 219
attcagcgcc gacgggacgt 20

<210> 220
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-12 effector species 11

<400> 220
attcagcgcc gacgggacgt t 21

<210> 221
<211> 22
<212> DNA
<213> Artificial Sequence

<220>

<223> shRNA-12 effector species 12

<400> 221
attcagcgcc gacgggacgt tt 22

<210> 222
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-12 effector species 13

<400> 222
attcagcgcc gacgggacgt ttt 23

<210> 223
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> shRNA-12 effector species 14

<400> 223
tggattcagc gccgacggga cgtt 24

<210> 224
<211> 75
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-12 DNA sequence plus flanking region

<400> 224
acagtgagcg agtcccgtcg gcgctgaatc cactgtgaag cagatgggtg gattcagcgc 60

cgacgggacg cgcct 75

<210> 225
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-12 effector species 1

<400> 225
tggattcagc gccgacgg 18

<210> 226
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-12 effector species 2

<400> 226
tggattcagc gccgacggga 20

<210> 227
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-12 effector species 3

<400> 227
tggattcagc gccgacggga c 21

<210> 228
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-12 effector species 4

<400> 228
tggattcagc gccgacggga cg 22

<210> 229
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> shmiR-12 effector species 5

<400> 229
tggattcagc gccgacggga cgc 23