

# SEQUENCE LISTING

<110> Silence Therapeutics AG

<120> MEANS FOR INHIBITING THE EXPRESSION OF ANG2

<130> A 19051 EP

<160> 104

<170> PatentIn version 3.3

<210> 1

<211> 2269

<212> RNA

<213> Homo sapiens

<400> 1

```

uggguuggug uuuaucuccu cccagccuug agggagggaa caacacugua ggaucugggg      60
agagaggaac aaaggaccgu gaaagcugcu cuguaaaagc ugacacagcc cucccaagug      120
agcaggacug uucuucccac ugcaaucuga caguuuacug caugccugga gagaacacag      180
caguaaaaaac cagguuugcu acuggaaaaa gaggaagag aagacuuuca uugacggacc      240
cagccauggc agcguagcag cccugcguuu cagacggcag cagcucggga cucuggacgu      300
guguuugccc ucaaguuuugc uaagcugcug guuuuuuacu gaagaaagaa uguggcagau      360
uguuuucuuu acucugagcu gugaucuugu cuuggccgca gccuauaaca acuuucggaa      420
gagcauggac agcauaggaa agaagcaaua ucagguccag cauggguccu gcagcuacac      480
uuuccuccug ccagagaugg acaacugccg cucuuccucc agcccuacg uguccaaugc      540
ugugcagagg gacgcgccgc ucgaauacga ugacucggug cagaggcugc aagugcugga      600
gaacaucaug gaaaacaaca cucaguggcu aaugaagcuu gagaauuua uccaggacaa      660
caugaagaaa gaaaugguag agauacagca gaaugcagua cagaaccaga cggcugugau      720
gauagaaaaua gggacaaacc uguugaacca aacagcugag caaacgcgga aguuacuga      780
uguggaagcc caaguauuaa aucagaccac gagacuugaa cuucagcucu uggaacacuc      840
ccucucgaca aacaaaauug aaaaacagau uuuggaccag accagugaaa uaaacaaauu      900
gcaagauaag aacaguuucc uagaaaagaa ggugcuagcu auggaagaca agcacaucau      960
ccaacuacag ucaauaaaaa aagagaaaaga ucagcuacag guguuaguau ccaagcaaaa     1020
uuccaucuuu gaagaacuag aaaaaaaaaa agugacugcc acggugaaua auucaguucu     1080
ucaaaagcag caacaugauc ucauggagac aguuauaauac uuacugacua ugauguccac     1140
aucaaacuca gcuaaggacc ccacuguugc uaaagaagaa caaauacgcu ucagagacug     1200
ugcugaagua uucaaaucag gacacaccac aaauaggcauc uacacguuaa cauucccuaa     1260
uucuacagaa gagaucaagg ccuacuguga cauggaagcu ggaggaggcg gguggacaau     1320
uauucagcga cgugaggau gacgcguuga uuucagagg acuuggaaag aaauaaaagu     1380

```

```

gggauuuggu aacccuucag gagaauauug gcugggaaau gaguuuguuu cgcaacugac 1440
uaaucagcaa cgcuaugugc uaaaaauaca ccuaaaagac uggaagggga augaggcuua 1500
cucauuguau gaacauuucu aucucucaag ugaagaacuc aaauauagga uucaccuuaa 1560
aggacuuaca gggacagccg gcaaaaauag cagcaucagc caaccaggaa augauuuuag 1620
cacaaaggau ggagacaacg 'acaaauguau uugcaaaugu ucacaaaugc uaacaggagg 1680
cuggugguuu gaugcaugug guccuuccaa cuugaacgga auguacuauc cacagaggca 1740
gaacacaaaau aaguucaacg gcauuaaaug guacuacugg aaaggcucag gcuauucgcu 1800
caaggccaca accaugauga uccgaccagc agauuucuaa acaucccagu ccaccugagg 1860
aacugucucg aacuaauuuc aaagacuuaa gccagugca cugaaaguca cggcugcgca 1920
cuguguccuc uuccaccaca gagggcgugu gcucggugcu gacgggacc acaugcucca 1980
gauuagagcc uguaaaacuu aucacuuaaa cuugcaucac uuaacggacc aaagcaagac 2040
ccuaaacauc cauaauugug auuagacaga acaccuaugc aaagaugaac ccgaggcuga 2100
gaaucagacu gacaguuuac agacgcugcu gucacaacca agaauuguau gugcaaguuu 2160
aucaguaaaau aacuggaaaa cagaacacuu auguuauaca auacagauca ucuuggaacu 2220
gcauucuucu gagcacuguu uauacacugu guaaauaccc auauguccu 2269

```

```

<210> 2
<211> 19
<212> RNA
<213> Artificial Sequence

```

```

<220>
<223> antisense siRNA

```

```

<400> 2
uuaacuuccg cguuugcuc 19

```

```

<210> 3
<211> 19
<212> RNA
<213> Artificial sequence

```

```

<220>
<223> sense siRNA

```

```

<400> 3
gagcaaacgc ggaaguuaa 19

```

```

<210> 4
<211> 19
<212> RNA
<213> Artificial sequence

```

```

<220>
<223> antisense siRNA

```

<400> 4	
uacuugggcu uccacauca	19
<210> 5	
<211> 19	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> sense siRNA	
<400> 5	
ugauguggaa gcccaagua	19
<210> 6	
<211> 19	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> antisense siRNA	
<400> 6	
uuguuuauuu cacuggucu	19
<210> 7	
<211> 19	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> sense siRNA	
<400> 7	
agaccaguga aaauaaaca	19
<210> 8	
<211> 19	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> antisense siRNA	
<400> 8	
uccaugucac aguaggccu	19
<210> 9	
<211> 19	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> sense siRNA	
<400> 9	
aggccuacug ugacaugga	19

<210> 10  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 10  
 ucauacaaug aguaagccu 19

<210> 11  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 11  
 aggcuuacuc auuguauga 19

<210> 12  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 12  
 auccuuugug cuaaaauca 19

<210> 13  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 13  
 ugauuuuagc acaaaggau 19

<210> 14  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 14  
 aguuggaagg accacaugc 19

<210> 15

<211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 15  
 gcaugugguc cuuccaacu 19

<210> 16  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 16  
 aucaucaugg uuguggccu 19

<210> 17  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 17  
 aggccacaac caugaugau 19

<210> 18  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 18  
 uagaaauaga auguuggag 19

<210> 19  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 19  
 cuccaacauu cuauuucua 19

<210> 20  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA  
  
 <400> 20  
 ucgagagggg guguuccaa 19

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

<220>  
 <223> sense siRNA  
  
 <400> 21  
 uuggaacacu cccucucga 19

<210> 22  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA  
  
 <400> 22  
 aucuuaagca cguagcggu 19

<210> 23  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA  
  
 <400> 23  
 accgcuacgu gcuuaagau 19

<210> 24  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA  
  
 <400> 24  
 auuuuaagca cauagcguu 19

<210> 25  
 <211> 19  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 25	
aacgcuaugu gcuuaaaau	19
<210> 26	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> antisense siRNA	
<400> 26	
auauuuuaca gccaggaaga aaa	23
<210> 27	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> sense siRNA	
<400> 27	
uuuucuuccu ggcuguuaaa uau	23
<210> 28	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> antisense siRNA	
<400> 28	
auauuuuaca aucaggcaga aaa	23
<210> 29	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> sense siRNA	
<400> 29	
uuuucugccu gauuguuaaa uau	23
<210> 30	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> antisense siRNA	
<400> 30	
uuauuuuacug cugaacucucc acg	23

<210> 31  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 31  
 cgugggaguu cagcaguaaa uaa 23

<210> 32  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 32  
 uuauuuacug auaaacuugc aca 23

<210> 33  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 33  
 ugugcaaguu uaucaguaaa uaa 23

<210> 34  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 34  
 auauaguaaa uaguagccag cca 23

<210> 35  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 35  
 uggcuggcua cuauuuacua uau 23

<210> 36



<211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 36  
 auauaaaauuu gaaauacgua uuu 23

<210> 37  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 37  
 aaauacguau uucaaaauua uau 23

<210> 38  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 38  
 uauuuuauua cuaaaaauac cuu 23

<210> 39  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 39  
 aagguauuuu uaguaauuaa aua 23

<210> 40  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 40  
 uuucaaauga acauguaaaag cac 23

<210> 41  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA  
  
 <400> 41  
 gugcuuuaca uguucauuug aaa 23  
  
 <210> 42  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence  
  
 <220>  
 <223> antisense siRNA  
  
 <400> 42  
 uuuugaaaua aaaauuuaaa gca 23  
  
 <210> 43  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence  
  
 <220>  
 <223> sense siRNA  
  
 <400> 43  
 ugcuuuaauu uuuuauuuca aaa 23  
  
 <210> 44  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence  
  
 <220>  
 <223> antisense siRNA  
  
 <400> 44  
 aaaaguuagg aaaaugaucu gcc 23  
  
 <210> 45  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence  
  
 <220>  
 <223> sense siRNA  
  
 <400> 45  
 ggcagaucau uuuccuaacu uuu 23  
  
 <210> 46  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence  
  
 <220>  
 <223> antisense siRNA

<400> 46	
cagaguaaag aaaacaaucu gcc	23
<210> 47	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> sense siRNA	
<400> 47	
ggcagauugu uuucuuuacu cug	23
<210> 48	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> antisense siRNA	
<400> 48	
aucaucaugg uuguggccuu gag	23
<210> 49	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> sense siRNA	
<400> 49	
cucaaggcca caaccaugau gau	23
<210> 50	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> antisense siRNA	
<400> 50	
uucaaguugg aaggaccaca ugc	23
<210> 51	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> sense siRNA	
<400> 51	
gcaugugguc cuuccaacu gaa	23

<210> 52  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 52  
 auauuuuaca gccaggaaga aaa 23

<210> 53  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 53  
 uuuucuuccu ggcuguuaaa uau 23

<210> 54  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 54  
 uuauuuacug cugaacucucc acg 23

<210> 55  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 55  
 cgugggaguu cagcaguaaa uaa 23

<210> 56  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 56  
 auauaguaaa uaguagccag cca 23

<210> 57

<211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 57  
 uggcuggcua cuauuuacua uau

23

<210> 58  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 58  
 uauuuuauua cuaaaaauac cuu

23

<210> 59  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 59  
 aagguauuuu uaguaauuaa aua

23

<210> 60  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 60  
 uuucaaauga acauguaaaag cac

23

<210> 61  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 61  
 gugcuuuaca uguucauuug aaa

23

<210> 62  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA  
  
 <400> 62  
 aaaaguuagg aaaaugaucu gcc 23  
  
 <210> 63  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence  
  
 <220>  
 <223> sense siRNA  
  
 <400> 63  
 ggcagaucau uuuccuaacu uuu 23  
  
 <210> 64  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence  
  
 <220>  
 <223> antisense siRNA  
  
 <400> 64  
 aucaucaugg uuguggccuu gag 23  
  
 <210> 65  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence  
  
 <220>  
 <223> sense siRNA  
  
 <400> 65  
 cucaaggcca caaccaugau gau 23  
  
 <210> 66  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence  
  
 <220>  
 <223> antisense siRNA  
  
 <400> 66  
 uucaaguugg aaggaccaca ugc 23  
  
 <210> 67  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence  
  
 <220>  
 <223> sense siRNA

<400> 67		
gcaugugguc cuuccaacu gaa		23
<210> 68		
<211> 23		
<212> RNA		
<213> Artificial sequence		
<220>		
<223> antisense siRNA		
<400> 68		
aguuggaagg accacaugcg uca		23
<210> 69		
<211> 23		
<212> RNA		
<213> Artificial sequence		
<220>		
<223> sense siRNA		
<400> 69		
ugacgcaugu gguccuucca acu		23
<210> 70		
<211> 2475		
<212> RNA		
<213> Mus musculus		
<400> 70		
gauacugaca cuguagacuc aggggagaaa caaagagucc gugcagaccu cuggagugag	60	
cagggcugcu ccuuccucuc aggacagcuc cgagugugcc ggggagaaga gaagagaaga	120	
gacaggcacu gggaaagagc cugcugcggg acggagaagg cucucacuga uggacuauuu	180	
cacacggcac agcccugugc cuuagacagc agcugagagc ucaggacgca aguuugcuga	240	
acucacaguu uagaacccaa aaagagagag agaauguggc agaucuuuuu ccuaacuuuu	300	
ggcugggauc uugucuuggc cucagccuac aguaacuuua ggaagagcgu ggacagcaca	360	
ggcagaaggc aguaccaggu ccagaacgga ccugcagcu acacguuccu gcugccggag	420	
accgacagcu gccgaucuuu cuccagcccc uacaugucca augccgugca gagggauuca	480	
ccccucgacu acgacgacuc agugcaaagg cugcaggugc uggagaacau ucuagagaac	540	
aacacacagu ggcugaugaa gcuggagaau uacauucagg acaacaugaa gaaggagaug	600	
guggagaucc aacagaaugu ggugcagaac cagacagcug ugaugauaga gauuggaacc	660	
agcuugcuga accagacagc agcacaaacu cggaacuga cugaugugga agcccaagua	720	
cuaaaccaga cgacaagacu cgagcugcag cuucuccaac auucuauuuc uaccaacaaa	780	
uuggaaaagc agauuuugga ucagaccagu gaaauaaaca agcuacaaaa uaagaacagc	840	

uuccuagaac agaaaguucu ggacauggag ggcaagcaca gcgagcagcu acaguccaug. 900  
 aaggagcaga aggacgagcu ccaggugcug guguccaagc agagcucugu cauugacgag 960  
 cuggagaaga agcuggugac agccacgguc aacaacucgc uccuucagaa gcagcagcau 1020  
 gaccuaaugg agaccgucaa cagcuugcug accaugaugu caucacccaa cuccaagagc 1080  
 ucgguugcua uccguaaaaga agagcaaacc accuucagag acugugcgga aaucuuaag 1140  
 ucaggacuca ccaccagugg caucuacaca cugaccuucc ccaacuccac agaggagauc 1200  
 aaggccuacu gugacaugga cgugggugga ggagggugga cagucaucca acaccgagaa 1260  
 gauggcagug uggacuucca gaggacgugg aaagaauaca aagagggcuu cgggagcccu 1320  
 cugggagagu acuggcuggg caaugaguuu gucucccagc ugaccgguca gcaccgcuac 1380  
 gugcuuaaga uccagcugaa ggacugggaa ggcaacgagg cgcauucgcu guaугaucac 1440  
 uucuaccucg cuggugaaga guccaacuac aggauucacc uuacaggacu cacggggacc 1500  
 gcgggcaaaa uaaguagcau cagccaacca ggaagugauu uuagcacaaa ggauucggac 1560  
 aaugacaaau gcaucugcaa guguucccag augcucucag gaggcuggug guuugacgca 1620  
 ugugguccuu ccaacuugaa uggacaguac uaccacaaa aacagaauac aaauaaguuu 1680  
 aacgguauc aугguacua cuggaagggg uccggcuacu cgcucaaggc cacaaccaug 1740  
 augauccggc cagcagauuu cuaaaugccu gccuacacua ccagaagaac uugcugcauc 1800  
 caaagauuaa cuccaaggca cugagagaca ccaaugcaua gcagccccuu uccacaucag 1860  
 gaagugcucc uggggguggg gagggucugu guguaccaga cugaagcgca ucacuaaagc 1920  
 cugcaccgcu aaccaacca aggcacugca gucuggagaa acacuucugg gaagguugug 1980  
 gcugaggauc agaaggacag cgugcagacu cugucacagg gaagaauguu ccgugggagu 2040  
 ucagcaguaa auaacuggaa aacagaacac uuagauggug cagauaaauc uugggaccac 2100  
 auuccucuaa gcacgguuuc uagagugaau acauucacag cucggcuguc acaugacaa 2160  
 ggccgugucc ucgcacugug gcagccagua uccagggacu ucuaaguggu gggcacaggu 2220  
 uaucaucugg agaagcacac auucauuguu uuuccuugg gugcuuaca uguucauug 2280  
 aaaacaacac auuuaccuau cuugauggcu uaguuuuuuaa uggcuggcua cuauuuacua 2340  
 uauggcaaaa augcccacau cucuggaaua accaccaaau aagcgccaug uuggugaug 2400  
 cggagacugu acuaauuugu uuucuuccug gcuguuuuuu augaagguau uuuuaguaau 2460  
 uaaauuaaag uuauu 2475

<210> 71  
 <211> 5267  
 <212> RNA  
 <213> Homo sapiens  
 <400> 71



aaagugauug	auucggauac	ugacacugua	ggaucugggg	agagaggaac	aaaggaccgu	60
gaaagcugcu	cuguaaaagc	ugacacagcc	cucccaagug	agcaggacug	uucuucccac	120
ugcaaucuga	caguuuacug	caugccugga	gagaacacag	caguaaaaaac	cagguuugcu	180
acuggaaaaa	gaggaaagag	aagacuua	uugacggacc	cagccauggc	agcguagcag	240
cccugcguuu	uagacggcag	cagcucggga	cucuggacgu	guguuugccc	ucaaguugc	300
uaagcugcug	guuuauuacu	gaagaaagaa	uguggcagau	uguuuucuuu	acucugagcu	360
gugaucuugu	cuuggccgca	gccuaaaca	acuuucggaa	gagcauggac	agcauaggaa	420
agaagcaaua	ucagguccag	cauggguccu	gcagcuacac	uuuccuccug	ccagagaugg	480
acaacugccg	cucuuccucc	agccccuacg	uguccaaugc	ugugcagagg	gacgcgccgc	540
ucgaauacga	ugacucggug	cagaggcugc	aagugcugga	gaacaucaug	gaaaacaaca	600
cucaguggcu	aaugaagcuu	gagaauuaua	uccaggacaa	caugaagaaa	gaaaugguag	660
agauacagca	gaaugcagua	cagaaccaga	cggcugugau	gauagaaaua	gggacaaacc	720
uguugaacca	aacagcggag	caaacgcgga	aguuaacuga	uguggaagcc	caaguaauaa	780
aucagaccac	gagacuugaa	cuucagcucu	uggaacacuc	ccucucgaca	aacaaaauugg	840
aaaaacagau	uuuggaccag	accagugaaa	uaaacaaauu	gcaagauaag	aacaguuuucc	900
uagaaaagaa	ggugcuagcu	auggaagaca	agcacaucau	ccaacuacag	ucaauaaaag	960
aagagaaaga	ucagcuacag	guguuaguau	ccaagcaaaa	uuccaucauu	gaagaacuag	1020
aaaaaaaaau	agugacugcc	acggugaaua	auucaguucu	ucagaagcag	caacaugauc	1080
ucauggagac	aguuaauaac	uuacugacua	ugauguccac	aucaaacucu	aaggacccca	1140
cuguugcuua	agaagaacaa	aucagcuuca	gagacugugc	ugaaguauuc	aaaucaggac	1200
acaccacgaa	uggcaucuc	acguuaacau	ucccuauuuc	uacagaagag	aucaaggccu	1260
acugugacau	ggaagcugga	ggaggcggu	ggacaauuau	ucagcgacgu	gaggauggca	1320
gcguugauuu	ucagaggacu	uggaaagaau	auaaaguggg	auuugguaac	ccuucaggag	1380
aaauuuggcu	gggaaaugag	uuuguuucgc	aacugacuaa	ucagcaacgc	uaugugcuua	1440
aaauacaccu	uaaagacugg	gaagggaau	aggcuuacuc	auuguaugaa	cauuucuauc	1500
ucucaaguga	agaacucaau	uauaggauuc	accuuaaagg	acuuacaggg	acagccggca	1560
aaauaagcag	caucagccaa	ccaggaaaug	auuuuagcac	aaaggauuga	gacaacgaca	1620
aauguaauuug	caaauguuca	caaaugcuua	caggaggcug	gugguuugau	gcaugugguc	1680
cuuccaacu	gaacggaaug	uacuauccac	agaggcagaa	cacaaauaag	uucaacggca	1740
uuaaauggua	cuacuggaaa	ggcucaggcu	auucgcucua	ggccacaacc	augaugaucc	1800
gaccagcaga	uuucuaaaca	ucccagucca	ccugaggaac	ugucucgaac	uauuuucaaa	1860
gacuuagcc	cagugcacug	aaagucacgg	cugcgcacug	uguccucuuc	caccacagag	1920

ggcgugugcu	cggugcugac	gggacccaca	ugcuccagau	uagagccugu	aaacuuuau	1980
acuuuaacuu	gcaucacuu	acggacccaa	gcaagacccu	aaacauccau	aaugugauu	2040
agacagaaca	ccuaugcaaa	gaugaacccg	aggcugagaa	ucagacugac	aguuuacaga	2100
cgcugcuguc	acaaccaaga	auguuauug	caaguuuau	aguaaaauac	uggaaaacag	2160
aacacuuau	uuauacaau	cagaucacu	uggaacugca	uucucugag	cacuguuau	2220
acacugugua	aaaucccau	uguccugaau	ucaccaucac	uaucaaaau	aaaaggaaga	2280
aaaaaacucu	cuaagccau	aaaagacau	uucagggau	uucugagaag	ggguuacuag	2340
aaguuaaua	uuuggaaaa	caguauugc	auuuuacuc	caucucuag	gugcuuaaa	2400
uuuuuauuc	aaaaacagcg	uauuuacau	uauugugac	gcuuaguau	aaguuaaugc	2460
ucaaaucgu	auuucaaa	uauaugguag	aaacuuccag	auucucugaa	auuaucaaca	2520
gaaacgugcc	auuuuaguu	auaugcagac	cguacuauu	uuucugccu	gauuguaaa	2580
uauaaggua	uuuuuagua	uuauauaua	cuuauaggg	gauaugccu	uguuaacuu	2640
uuauauaua	auuuacaau	uuauauuuu	uuuccaaaag	accuaauugu	gccuugugau	2700
aaggaaacuu	cuuacuuuu	augaugagga	aaauuauaca	uuucauucua	ugacaaagaa	2760
acuuuacuau	cuucucacua	uucuaaaaca	gaggucuguu	uucuuuccua	guaagauau	2820
uuuuuauaga	acuagacuac	auuuuaauuu	cugguugaga	aaagccuucu	auuaagaaa	2880
uuuacaaagc	uauaugucuc	aagauucacc	cuuaaaauua	cuuaaggaaa	aaaauauug	2940
acacuaguua	guuuuuuuu	gucaaucagc	aaacugaaaa	aaaaaaaagg	guuucaaagu	3000
gcaaaaacaa	auucugaugu	ucauaauau	uuuaaaauuu	uaccaaaaau	uugagaacac	3060
agggcugggc	gcaguggcuc	acaccuaua	ucccaguaca	uugguaggca	aggugggcag	3120
aucaccugag	gucaggaguu	caagaccagc	cuggacaaca	uggugaaacc	cugucucuac	3180
uaauauauac	aaaaauuagc	caggcgugcu	ggcgggcacc	uguaauccca	gcuacucggg	3240
aggcugaggc	agggagaauu	gcuugcacca	gggagguaga	gguugcagug	agccaagauc	3300
gcaccacugc	acuccagccg	gggcaacaga	gcaagacucc	aucucaaaaa	aaaaaaaaaa	3360
aaaagaaaga	aaagaaaaau	ugagaacaca	gcuuuauacu	cgggacuaca	aaaccuauaa	3420
cuccuggagu	uuuaacuccu	uuugaaaauu	ucauaguaca	auuaauacua	augaacauuu	3480
guguaaagcu	uuauauuuu	aaggcaauuu	cucauauuu	uuuucugaa	ucauuugcaa	3540
ggaaguucag	aguccagucu	guaacuagca	ucuacuauu	gucugucuuc	accuuacagu	3600
guucuaaccau	uuuuuuuucu	uuauuccauu	ucaaaaucua	auuuuuuuu	ccccaacuuc	3660
uccccaccac	uugacguagu	uuuagaacac	acagguguug	cuacauuuu	ggagucaaug	3720
auggacucug	gcaaagucua	ggcucuguuu	uauuuccacc	aaggugcacu	uuuccaaca	3780

cuauuuuacu	aguuaagaac	cucccuauuc	uagaacugua	ucuacuuuau	auuuuagaag	3840
guuuuuugaa	uucaacaacg	guaucauggc	cuuguaucaa	guugaaaaac	aacugaaaau	3900
aagaaaauuu	cacagccucg	aaagacaaca	acaaguuuuc	aggauaucuc	aaugacaaga	3960
gugauggaua	cuuagguagg	gaaacgcuaa	ugcaggaaaa	acuggcaaca	acacaauuuu	4020
uaucaauuc	cuuuguaggc	aggugauaaa	aaauucaagg	acaaucuca	uuauugcauu	4080
gugcaucaua	uauaaucucu	uauagagcgag	aaugggggga	auuuguguuu	uuacuuuaca	4140
cuucaauucc	uuacacggua	uuucaaaca	acaguuuuug	ugagaggagc	uuuugucucu	4200
ccuuuagaaa	auguuuauaa	agcugaaaag	aaaucaaaac	guaaucuuu	aaaugaaaac	4260
aaaacaaccc	aacaaccuag	auaacuacag	ugaucaggga	gcacaguuca	acuccuuguu	4320
auguuuuagu	cauauggccu	acucaaacag	cuaauuaaca	acaccagugg	cagauaaaaa	4380
ucaccauuu	ucuuucagcu	auuaaucuuu	ugaaugaaua	aacugugaca	aacaaaauua	4440
cauuuuugaa	caugaaaggc	aacuucugca	caauccugua	uccaagcaaa	cuuuaaaaua	4500
uccacuuau	uauuacuuu	ucuuaaaaaa	aaauagaacc	cagaacuuu	caugaagca	4560
uuugaaaguu	gaaguggaau	uuaggaaagc	cauaaaaaua	uaauuacugu	uaucaacagc	4620
ccagcaagcc	auaaucuuu	uaccuauacg	uucuaauuuc	auuaacagua	aaaacauuaa	4680
gcaagauua	agacuaccug	cccaagaauu	cagucuuuuu	ucauuuuugu	uuuucucagu	4740
ucugaggau	uuauucguca	aauuuucuuu	ggacugcauu	ccucacuacu	uuuugcacia	4800
uggucucacg	uucucacauu	uguucucgcg	aauaaaauu	uaaaaggugu	uaaguucugu	4860
gaaugucuuu	uuauuuauug	gcauaauugu	gcuugacugg	auaaaaacuu	aaguccaccc	4920
uuauuuuuu	aauaauuuuc	ugagaacagc	aaacugcauu	uaccaucgua	aaacaacauc	4980
ugacuuaacg	gagcugcagg	gaagugguga	gacaguucga	acggcuccuc	agaaauccag	5040
ugacccaauu	cuaaagacca	uagcaccugc	aagugacaca	acaagcagau	uuauuuuaca	5100
uuuuuuagcc	uuagcaggca	auaaaccaag	aucaacuui	aagacacagc	aaaaagugau	5160
acacuccgca	gaucugaaau	agauguguuc	ucagacaaca	aagucccuuc	agaauucuca	5220
uguugcauaa	auguuuugaa	uauuaauaaa	aaguugauug	agaaaaa		5267

<210> 72  
 <211> 5114  
 <212> RNA  
 <213> Homo sapiens

<400> 72	
aaagugauug	auucggauac
ugacacugua	ggauucgggg
agagaggaac	aaaggaccgu
60	
gaaagcugcu	cuguaaaagc
ugacacagcc	cucccaagug
agcaggacug	uucuucccac
120	
ugcaaucuga	caguuuacug
caugccugga	gagaacacag
caguaaaaac	cagguuugcu
180	

acuggaaaaa	gaggaaagag	aagacuuuca	uugacggacc	cagccauggc	agcguagcag	240
cccugcguuu	uagacggcag	cagcucggga	cucuggacgu	guguuugccc	ucaaguugc	300
uaagcugcug	guuuauuacu	gaagaaagaa	uguggcagau	uguuuucuuu	acucugagcu	360
gugaucuugu	cuuggccgca	gccuauaaca	acuuucggaa	gagcauggac	agcauaggaa	420
agaagcaaua	ucagguccag	cauggguccu	gcagcuacac	uuuccuccug	ccagagaugg	480
acaacugccg	cucuuccucc	agcccuacg	uguccaaugc	ugugcagagg	gacgcgccgc	540
ucgaauacga	ugacucggug	cagaggcugc	aagugcugga	gaacaucaug	gaaaacaaca	600
cucaguggcu	aaugaaggua	uuaaaucaga	ccacgagacu	ugaacuucag	cucuuggaac	660
acucccucuc	gacaaacaaa	uuggaaaaac	agauuuugga	ccagaccagu	gaaauaaaca	720
aaugcaaga	uaagaacagu	uuccuagaaa	agaaggugcu	agcuauaggaa	gacaagcaca	780
ucauccaacu	acagucaaua	aaagaagaga	aagaucagcu	acagguguaa	guauccaagc	840
aaaauuccau	cauugaagaa	cuagaaaaaa	aaauagugac	ugccacggug	aaauauucag	900
uuuucagaa	gcagcaacau	gaucucaugg	agacaguuaa	uaacuuacug	acuaugaugu	960
ccacaucaaa	cucagcuaag	gaccccacug	uugcuaaaaga	agaacaaauc	agcuucagag	1020
acugugcuga	aguauucaaa	ucaggacaca	ccacgaauagg	caucuacacg	uuaacauucc	1080
cuaauucua	agaagagauc	aaggccuacu	gugacaugga	agcuggagga	ggcgggugga	1140
caauuauuca	gcgacgugag	gauggcagcg	uugauuuuca	gaggacuugg	aaagaauuaa	1200
aagugggauu	ugguaacccu	ucaggagaa	auuggcuggg	aaaugaguuu	guuucgcaac	1260
ugacuaauca	gcaacgcua	gugcuuaaaa	uacaccuuaa	agacugggaa	gggaugagg	1320
cuuacucauu	guaugaacau	uucuaucucu	caagugaaga	acucaauuau	aggauucacc	1380
uuaaaggacu	uacagggaca	gccggcaaaa	uaagcagcau	cagccaacca	ggaaaugauu	1440
uuagcacaaa	ggauggagac	aacgacaaa	guauuugcaa	auguucacaa	augcuaacag	1500
gaggcuggug	guuugaugca	ugugguccuu	ccaacuugaa	cggaauguac	uauccacaga	1560
ggcagaacac	aaauaaguuc	aacggcauu	aaugguacua	cuggaaaggc	ucaggcuauu	1620
cgcucaaggc	cacaaccaug	augauccgac	cagcagauuu	cuaaacaucc	caguccaccu	1680
gaggaacugu	cucgaacuau	uuucaaagac	uuuagcccag	ugcacugaaa	gucacggcug	1740
cgcacugugu	ccucuuccac	cacagagggc	gugugcucgg	ugcugacggg	accacaugc	1800
uccagauuag	agccuguaaa	cuuuaucacu	uaaacuugca	ucacuuaacg	gaccaaagca	1860
agaccuuaaa	cauccauaa	ugugauuaga	cagaacaccu	augcaaagau	gaacccgagg	1920
cugagaauca	gacugacagu	uuacagacgc	ugcugucaca	accaagaau	uuauugcaa	1980
guuuaucagu	aaauaacugg	aaaacagaac	acuuauuguu	uacaauacag	aucaucuugg	2040
aacugcauuc	uucugagcac	uguuuauaca	cuguguaau	accuauaugu	ccugaauuca	2100

ccaucacua	cacaauuaa	aggaagaaa	aaacucucua	agccauaaaa	agacauauuc	2160
agggauauuc	ugagaagggg	uuacuagaag	uuuaauuuu	ggaaaaacag	uuagugcauu	2220
uuuacuccau	cucuuaaggug	cuuuaaaauu	uuauuucaaa	aacagcguau	uuacauuuau	2280
guugacagcu	uaguuaaag	uuaaugcuca	aaucguauu	ucaaauuuau	augguagaaa	2340
cuuccagaau	cucugaaaau	aucaacagaa	acgugccauu	uuaguuuua	ugcagaccgu	2400
acuauuuuuu	ucugccugau	uguuaaaau	gaagguauuu	uuaguaauua	aaauaaacuu	2460
auuaggggau	augccuaugu	uuacuuaau	ugauaaauu	uacaauuuua	uaauuuguuu	2520
ccaaaagacc	uaauugugcc	uugugauaag	gaaacuucuu	acuuuuuau	augaggaaaa	2580
uuauacauuu	cauucuauga	caaagaaacu	uuacuauuu	cucacuauc	uaaaacagag	2640
gucuguuuuc	uuuccuagua	agauauauuu	uuauagaacu	agacuacaau	uuaauuucug	2700
guugagaaaa	gccuucuaau	uaagaaaauu	acaaagcuau	augucucaag	auucacccuu	2760
aaauuuacuu	aaggaaaaaa	auaaauugaca	cuaguaaguu	uuuuuauug	aaucagcaaa	2820
cugaaaaaaa	aaaaaggggu	ucaaagugca	aaaacaaaa	cugauguuca	uaauauauuu	2880
aaauuuuac	caaaaaauug	agaacacagg	gcugggcgca	guggcucaca	ccuauaauc	2940
caguacauug	guaggcaagg	ugggcagauc	accugagguc	aggaguucua	gaccagccug	3000
gacaacaugg	ugaaaccucg	ucucuacuaa	auaaauacaa	aaauagccag	gcgugcuggc	3060
gggcaccugu	aaucccagcu	acucgggagg	cugaggcagg	gagaauugcu	ugcaccaggg	3120
agguagaggu	ugcagugagc	caagaucgca	ccacugcacu	ccagccgggg	caacagagca	3180
agacuccauc	ucaaaaaaaa	aaaaaaaaaa	agaaagaaaa	gaaaauuuga	gaacacagcu	3240
uuauacucgg	gacuacaaaa	ccauaaacuc	cuggaguuuu	aacuccuuuu	gaaauuuuca	3300
uaguacaauu	aaucuaaag	aacauuugug	uaaagcuua	uaauuuuag	gcaauuucuc	3360
auauauucuu	uucugaauc	uuugcaagga	aguucagagu	ccagucugua	acuagcaucu	3420
acuauauguc	ugucuucacc	uuacaguguu	cuaccuuau	uuuuucuuu	uuccauuuca	3480
aaucuaauu	uaauuuacc	caacuucucc	ccaccacuug	acguaguuuu	agaacacaca	3540
gguguugcua	cauauuugga	gucaaugaug	gacucuggca	aagucaaggc	ucuguuuuau	3600
uuccaccaag	gugcacuuuu	ccaacaacua	uuuaacuagu	uaagaaccuc	ccuauuuuag	3660
aacuguaucu	acuuuauauu	uaagaagggu	uuauuauuc	aacaacggua	ucauggccuu	3720
guaucaaguu	gaaaaacaac	ugaaaaauaag	aaaauuucac	agccucgaaa	gacaacaaca	3780
aguuuuag	auaucucaau	gacaagagug	auggauacuu	agguaggga	acgcuaaugc	3840
aggaaaaacu	ggcaacaaca	caauuuauau	caauucucuu	uguaggcagg	ugauaaaaaa	3900
uucaaggaca	aaucucauu	ugucauugug	caucauauau	aaucucuau	gagcgagaau	3960

```

gggggggaaau uguguuuuuu cuuuacacuu caauuccuua cacgguaauu caaacaaca 4020
guuuugcuga gagggagcuuu ugucucuccu uaagaaaauug uuuauaaagc ugaaaggaaa 4080
ucaaacagua aucuuaaaaa ugaaaacaaa acaacccaac aaccuagaua acuacaguga 4140
ucaggggagca caguucaacu ccuuguuaug uuuuagucuu auggccuacu caaacagcua 4200
aauaacaaca ccaguggcag aaaaaaaauca ccuuuuauuc uucagcuauu aaucuuuuga 4260
augaauaaac ugugacaaac aaauuaacau uuuugaacau gaaaggcaac uucugcacia 4320
uccuguaucc aagcaaacu uaaauuaucc acuuauuuau uacuuauuc uaaaaaaaaau 4380
uagaacccag aacuuuucaa ugaagcauuu gaaaguugaa guggaauuuu ggaaagccau 4440
aaaaauauaa auacuguuau cacagcacca gcaagccaua aucuuuauac cuaucaguuc 4500
uauuuucuuu aacaguaaaa acauuaagca agauuaaga cuaccugccc aagaauucag 4560
ucuuuuuuca uuuuuguuuu ucucaguucu gaggauguua aucgucaauu uuucuuugga 4620
cugcauuccu cacuacuuuu ugcacaaugg ucucacguuc ucacauuugu ucucgcgaau 4680
aaauugauaa aagguguuaa guucugugaa ugucuuuuu auuaugggca uaauugugcu 4740
ugacuggaua aaaacuuaag uccacccuua uguuuauau aauuucuuu gaacagcaaa 4800
cugcauuuac caucguaaaa caacaucuga cuuacgggag cugcagggaa guggugagac 4860
aguucgaacg gcuccucaga aauccaguga cccaauucua aagaccuag caccugcaag 4920
ugacacaaca agcagauuuu uuauacauuu auuagccuua gcaggcaaua aaccaagaau 4980
cacuuugaag acacagcaaa aagugauaca cuccgcagau cugaaauaga uguguucuca 5040
gacaacaaaag ucccuucaga aucuucagu ugcauuuau uuaugaauu uaauaaaaag 5100
uugauugaga aaaa 5114

```

```

<210> 73
<211> 23
<212> RNA
<213> Artificial sequence

```

```

<220>
<223> sense siRNA

```

```

<400> 73
cccuacgug uccaugcug ugc 23

```

```

<210> 74
<211> 23
<212> RNA
<213> Artificial sequence

```

```

<220>
<223> antisense siRNA

```

```

<400> 74
gcacagcauu ggacacguag ggg 23

```

<210> 75  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 75  
 ggaacacucc cucucgacaa aca

23

<210> 76  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 76  
 uguuugucga gagggagugu ucc

23

<210> 77  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 77  
 ccagaccagu gaaauaaaca aaU

23

<210> 78  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 78  
 auuuguuuau uucacugguc ugg

23

<210> 79  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 79  
 ccaucauuga agaacuagaa aaa

23

<210> 80

<211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 80  
 uuuuucuagu ucuucaauga ugg 23

<210> 81  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 81  
 ggagacaguu aauaacuuac uga 23

<210> 82  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 82  
 ucaguaaguu auuaacuguc ucc 23

<210> 83  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 83  
 agacugugcu gaaguauuca aa 23

<210> 84  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 84  
 auuugaauac uucagcacag ucu 23

<210> 85  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence



<220>  
 <223> sense siRNA

<400> 85  
 acaccacgaa uggcaucuac acg 23

<210> 86  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 86  
 cguguagaug ccuucgugg ugu 23

<210> 87  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 87  
 cacguuaaca uucccuauu cua 23

<210> 88  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 88  
 uagaauuagg gaauguuaac gug 23

<210> 89  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 89  
 aggacuugga aagaauauaa agu 23

<210> 90  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 90	
acuuuauauu cuuuccaagu ccu	23
<210> 91	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> sense siRNA	
<400> 91	
aaaauacacc uuaaagacug gga	23
<210> 92	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> antisense siRNA	
<400> 92	
ucccagucuu uaagguguau uuu	23
<210> 93	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> sense siRNA	
<400> 93	
ggaagggaau gaggcuuacu cau	23
<210> 94	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> antisense siRNA	
<400> 94	
augaguaagc cucauucccu ucc	23
<210> 95	
<211> 23	
<212> RNA	
<213> Artificial sequence	
<220>	
<223> sense siRNA	
<400> 95	
ugaugcaugu gguccuucca acu	23

<210> 96  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 96  
 aguuggaagg accacaugca uca 23

<210> 97  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 97  
 aaauaaguuca acggcauuaa aug 23

<210> 98  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 98  
 cauuuaaugc cguugaacuu auu 23

<210> 99  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 99  
 aggcucaggc uauucgcuca agg 23

<210> 100  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 100  
 ccuugagcga auagccugag ccu 23

<210> 101

<211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 101  
 aggccacaac caugaugauc cga

23

<210> 102  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 102  
 ucggaucauc augguugugg ccu

23

<210> 103  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> sense siRNA

<400> 103  
 ccgaccagca gauuucuaaa cau

23

<210> 104  
 <211> 23  
 <212> RNA  
 <213> Artificial sequence

<220>  
 <223> antisense siRNA

<400> 104  
 auguuuagaa aucugcuggu cgg

23