Figure S1A. Locations, structures and scores of predicted vertebrate miRNA target sites. miRNA: mir-1 Human predicted target: ENSG00000108654 Mouse predicted target: ENSMUSG00000020719 Rat predicted target: ENSRNOG00000013899 Fugu predicted target: SINFRUG00000143955 Hs Gene description: PROBABLE RNA-DEPENDENT HELICASE P68 (DEAD-BOX PROTEIN P68) (DEAD-BOX PROTEIN 5). [Source:SWISSPROT; Acc:P17844] NM 004396 mir-1 ENSG00000108654 2307 nt UTR 1 hits 163 >ENSG00000108654 hs-mir-1 163 170 UGGAAUGUAAAGAAGUAUGUAU&UGCACUUUUUCGCUAUUUAAGUUGGAUAUUUCUCUACAUUCCU mir-1 ENSMUSG00000020719 2302 nt UTR 2 hits 164 2013 ----1----->ENSMUSG00000020719 hs-mir-1 164 171 UGGAAUGUAAAGAAGUAUGUAU&GCACUUUUUUCGCUAUUUAAGUUGGAUAUUUCUCUACAUUCCU >ENSMUSG00000020719 hs-mir-1 2013 2020 UGGAAUGUAAAGAAGUAUGUAU&UUUGCCAGCAUUAGUAUAAACUAAAAGUGCACAACACAUUCCC .(((((((.....((((....&.........)))))....))))))....))))) mir-1 ENSRNOG00000013899 2307 nt UTR 1 hits 167

```
>ENSRNOG00000013899 hs-mir-1
                      167
                           174
UGGAAUGUAAAGAAGUAUGUAU&GCACUUUUUUCGCUAUUUAAGUUGGAUAUUUCUCUACAUUCCU
mir-1
       SINFRUG00000143955 2000 nt UTR 1 hits 212
 >SINFRUG00000143955 hs-mir-1 212
                           219
UGGAAUGUAAAGAAGUAUGUAU&GAUGCACAUUUUUCAUCCUUUAUUGCAUAUUUGUUACAUUCCU
miRNA: mir-1
Human predicted target: ENSG00000145925
Mouse predicted target: ENSMUSG00000025867
Rat predicted target: ENSRNOG0000000105
Fugu predicted target: SINFRUG00000121517
Fugu predicted target: SINFRUG00000145582
Hs Gene description: COMPLEXIN 2 (SYNAPHIN 1) (921-L).
[Source:SWISSPROT; Acc:Q13329] NM 006651
mir-1
      ENSG00000145925 2183 nt UTR 2 hits 295 357
._____
>ENSG00000145925 hs-mir-1 295
                         302
UGGAAUGUAAAGAAGUAUGUAU&GAAGCCUAAGGUCGUGCUAGUGUGGUGACCCCCAUACAUUCCU
```

>ENSG00000145925 hs-mir-1 357 364
UGGAAUGUAAAGAAGUAUGUAU&GAGGACCACUGUCCCCAGCCAGCCAAAGUAAUGACACAUUCCAG
((((((((()))))))))14.90
mir-1 ENSMUSG00000025867 2000 nt UTR 2 hits 340 402
11
>ENSMUSG00000025867 hs-mir-1 340 347
UGGAAUGUAAAGAAGUAUGUAU&AUGGUCUAUGUUAAUGUGGUGACACUCCCCCCAUACAUUCCU
.((((((((()))))))))15.10
>ENSMUSG00000025867 hs-mir-1 402 409
UGGAAUGUAAAGAAGUAUGUAU&GAGGACCACUGUCCCCAGCCAGCCAAAGUAAUGACACAUUCCAG
((((((((()))))))))14.90
mir-1 ENSRNOG0000000105 2000 nt UTR 2 hits 329 391
1-1
>ENSRNOG000000105 hs-mir-1 329 336
UGGAAUGUAAAGAAGUAUGUAU&AUGGUCUACAUUAGUGUGGUAACACUCCCCCCAUACAUUCCU
.((((((((()))))))))15.10
>ENSRNOG0000000105 hs-mir-1 391 398
UGGAAUGUAAAGAAGUAUGUAU&GAGGACCACUGUCCCCAGCCAGCCAAAGUAAUGACACAUUCCAG
(((((((()))))))))14.90
mir-1 SINFRUG00000121517 2000 nt UTR 1 hits 1874
1
>SINFRUG00000121517 hs-mir-1 1874 1881

UGGAAUGUAAAGAAGUAUGUAU&AAACCCUGAAAAAAGAUAUUGUAUUAAUACUCAACACAUUCCU

```
mir-1
   SINFRUG00000145582 2000 nt UTR 3 hits 956 974 1187
-----2-----1------1
>SINFRUG00000145582 hs-mir-1 956 963
>SINFRUG00000145582 hs-mir-1 974 981
UGGAAUGUAAAGAAGUAUGUAU&UCUUCCGUCACGUCAAAACAUUCCAGAGAUCUCAAACAUUCCAC
>STNFRUG00000145582 hs-mir-1 1187
miRNA: let-7a
Human predicted target: ENSG00000108821
Mouse predicted target: ENSMUSG0000001506
Rat predicted target: ENSRNOG0000003897
Fugu predicted target: SINFRUG00000130987
Hs Gene description: COLLAGEN ALPHA 1(I) CHAIN PRECURSOR.
[Source:SWISSPROT; Acc:P02452]
let-7a ENSG00000108821 2000 nt UTR 1 hits 789
```

```
>ENSG00000108821 hs-let-7a 789 796
UGAGGUAGUUGUAUAGUU&UGUUCUGUUCCUUGUGUAACUGUGUUGCUGAAAGACUACCUCGU
let-7a ENSMUSG00000001506 2228 nt UTR 1 hits 786
 >ENSMUSG0000001506 hs-let-7a 786 793
UGAGGUAGUAGGUUGUAUAGUU&GUUCUAUUCCUCAGUGCAAUUGUGUUGCUGAAAGACUACCUCGU
let-7a
    ENSRNOG00000003897 2000 nt UTR 1 hits 1992
>ENSRNOG00000003897 hs-let-7a 1992 1999
UGAGGUAGUUGUAUAGUU&UGUUCUGUUCCUUGUGUAAUUGUGUUGCUGAAAGACUACCUCGU
let-7a
     SINFRUG00000130987 2000 nt UTR 1 hits 508
>SINFRUG00000130987 hs-let-7a 508
                     515
UGAGGUAGUAGGUUGUAUAGUU&AAAGAAGCUUCACCUUAAUGGCAAUAUGUAGAUGGCUACCUCAU
```

miRNA: let-7a

Human predicted target: ENSG00000119906

Mouse predicted target: ENSMUSG00000036097

```
Rat predicted target: ENSRNOG00000014489
Fugu predicted target: SINFRUG00000140611
Hs Gene description: C100RF6. [Source:RefSeq;Acc:NM 018121] NM 144592
     ENSG00000119906
                 2862 nt UTR 2 hits 1326 1560
let-7a
   -----1----1----1
>ENSG00000119906 hs-let-7a 1326
                   1333
>ENSG00000119906 hs-let-7a 1560 1567
UGAGGUAGUAGGUUGUAUAGUU&UGUUGUUUACUGGUAAGAAUAUUAUUAUCUUGAUACUACCUCU
ENSMUSG00000036097 4668 nt UTR 2 hits 1314 1542
let-7a
   .-----1-----1-----1
>ENSMUSG00000036097 hs-let-7a 1314 1321
UGAGGUAGUUGUAUAGUU&GAGAGGAGAAAAUAAGUUCUGAGAGCUAACUCUUUCUACCUCU
>ENSMUSG00000036097 hs-let-7a 1542
                      1549
UGAGGUAGUUGUAUAGUU&GUGUUGAGUUUACUGGUAAGAAUAUUGUCUUGAUGCUACCUCU
ENSRNOG00000014489 4549 nt UTR 2 hits 1194 1424
let-7a
 -----1----1----1
```

>ENSRNOG00000014489 hs-let-7a 1194 1201 UGAGGUAGUUGUAUAGUU&UUGAGAGGAGAAAAUAAGUUCUGAGAGCUAACUUUCUACCUCU >ENSRNOG00000014489 hs-let-7a 1424 1431 UGAGGUAGUUGUAUAGUU&GUGUUGAGUUUACUGGUAAGAAUAUUGUCUUGAUGCUACCUCU let-7a SINFRUG00000140611 2000 nt UTR 1 hits 673 >SINFRUG00000140611 hs-let-7a 673 680 UGAGGUAGUUGUAUAGUU&UAUGACUGAAUGGUUUAUCCACCAUCUUAGGCCUACUACCUCU miRNA: let-7a Human predicted target: ENSG00000140807 Mouse predicted target: ENSMUSG00000031661 Rat predicted target: ENSRNOG0000014293 Fugu predicted target: SINFRUG00000134205 Hs Gene description: NAKED CUTICLE HOMOLOG 1; NAKED CUTICLE-1; DVL-BINDING PROTEIN. [Source:RefSeq; Acc: NM 033119] NM 033119 let-7a ENSG00000140807 2436 nt UTR 1 hits 427 >ENSG00000140807 hs-let-7a 427 434

UGAGGUAGUUGUAUAGUU&GAGACCCUCGAAAUCUCCGAGAAGAUAAACAGCUGCUACCUCU

```
ENSMUSG00000031661 2172 nt UTR 1 hits 376
let-7a
 >ENSMUSG00000031661 hs-let-7a 376 383
UGAGGUAGUUGUAUAGUU&CGGAGACCCUCAAGAGCCCCAGAGGACAACAGCUGCUACCUCU
let-7a
    ENSRNOG00000014293 2000 nt UTR 1 hits 379
>ENSRNOG00000014293 hs-let-7a 379 386
UGAGGUAGUUGUAUAGUU&CAGAGACCCUCAAGAGCUCCAGAGGACAACAGCUGCUACCUCU
let-7a
    SINFRUG00000134205 2000 nt UTR 1 hits 776
-----1
>SINFRUG00000134205 hs-let-7a 776
                    783
UGAGGUAGUAGGUUGUAUAGUU&AAGUUUAGGAAAAGUAAGAGACCCAAAAUCAGCUGCUACCUCU
```

miRNA: let-7a

Human predicted target: ENSG00000156966

Mouse predicted target: ENSMUSG00000047290

Rat predicted target: ENSRNOG00000018267

```
Fugu predicted target: SINFRUG00000151687
Hs Gene description: UDP-GLCNAC:BETAGAL BETA-1,3-N-
ACETYLGLUCOSAMINYLTRANSFERASE 7. [Source:RefSeq;Acc:NM 145236] NM 145236
    ENSG00000156966 2048 nt UTR 2 hits 637 1105
let-7a
>ENSG00000156966 hs-let-7a 637 644
UGAGGUAGUAGGUUGUAUAGUU&GUGUCCUGUAAGGUCUGGAAGGGCGACCGCUCUGACUACCUCAG
>ENSG00000156966 hs-let-7a 1105 1112
UGAGGUAGUAGGUUGUAUAGUU&CAGCUGUGGGGGUGGGUGCAGAAGGUUGCCACCUCCUACCUCAG
let-7a
     ENSMUSG00000047290 3076 nt UTR 1 hits 576
   _____1____1____1_____1
>ENSMUSG00000047290 hs-let-7a 576 583
UGAGGUAGUAGGUUGUAUAGUU&CUUCUUGUCCAGAAGCCUGACUGGCCGCUCUGACUACCUCAG
let-7a
     ENSRNOG00000018267 2000 nt UTR 1 hits 566
 >ENSRNOG00000018267 hs-let-7a 566 573
UGAGGUAGUAGGUUGUAUAGUU&CUUCUCGUCCAGAAGCCUGACUGGCCACUCUGACUACCUCAG
let-7a
     SINFRUG00000151687 2000 nt UTR 1 hits 749
```

```
>SINFRUG00000151687 hs-let-7a 749
                           756
UGAGGUAGUAGGUUGUAUAGUU&AUAGGUUAAAGCCGAGAAGGAAAAUGAAUAACACUCUACCUCAG
miRNA: let-7a
Human predicted target: ENSG00000168758
Mouse predicted target: ENSMUSG00000026121
Rat predicted target: ENSRNOG00000016254
Fugu predicted target: SINFRUG00000125424
Hs Gene description: SEMA DOMAIN, IMMUNOGLOBULIN DOMAIN (IG),
TRANSMEMBRANE DOMAIN TM. [Source:RefSeq; Acc: NM 017789] NM 017789
let-7a
      ENSG00000168758 2884 nt UTR 1 hits 67
  _____
>ENSG00000168758 hs-let-7a 67 74
UGAGGUAGUUGUAUAGUU&GGGAGGUGUAGCUCCUACUUUUGCACAGGCACCAGCUACCUCAG
ENSMUSG00000026121 2000 nt UTR 1 hits 74
let.-7a
.-1-----
>ENSMUSG00000026121 hs-let-7a 74
                            81
UGAGGUAGUUGUAUAGUU&GGGAGGUGCACUCUUAACUUUUGCACAGGCACCAGCUACCUCAG
ENSRNOG00000016254 2862 nt UTR 1 hits 75
let-7a
```

```
>ENSRNOG00000016254 hs-let-7a 75 82
UGAGGUAGUAGGUUGUAUAGUU&GGGAGGUGCACUCUUAACUUUUGCACAGGCACCAGCUACCUCAG
SINFRUG00000125424 2000 nt UTR 1 hits 57
let-7a
>SINFRUG00000125424 hs-let-7a 57 64
UGAGGUAGUUGUAUAGUU&UCAUGUCUGCAAGUCAGAAAAACAAACAACCAAUCUACCUCC
miRNA: let-7a
Human predicted target: ENSG00000169635
Mouse predicted target: ENSMUSG00000050240
Rat predicted target: ENSRNOG0000001863
Fugu predicted target: SINFRUG00000140659
Hs Gene description: HYPERMETHYLATED IN CANCER 2 PROTEIN (HIC-2) (HIC-3)
(HIC1-RELATED GENE ON CHROMOSOME 22). [Source:SWISSPROT; Acc:Q96JB3]
let-7a ENSG00000169635 2050 nt UTR 3 hits 211 543 1158
>ENSG00000169635 hs-let-7a 211 218
UGAGGUAGUUGUAUAGUU&AGCCGAGAGGAGGGAAGCCAGGGGUCCCAGCCCGUCUACCUCC
```

```
>ENSG00000169635 hs-let-7a 543 550
UGAGGUAGGUUGUAUAGUU&CACUGGCGCUGGGACAGUCAGGGUGACCCCACCGCCUACCUCU
.(((((((...(((((......)))))...)))......))))...)))))....))
>ENSG00000169635 hs-let-7a 1158 1165
UGAGGUAGUUGUAUAGUU&CCUCGCUGAACAAGGUGGAGACUUCUGACCUUUUGCUACCUCU
ENSMUSG00000050240 2000 nt UTR 3 hits 307 635 1286
let-7a
>ENSMUSG00000050240 hs-let-7a 307
                        314
UGAGGUAGUUGUAUAGUU&AGUCUAGCCCUAUGCAUGUGGUGCUGGUGACUAUUCUACCUCC
>ENSMUSG00000050240 hs-let-7a 635
                        642
UGAGGUAGUUGUAUAGUU&UAGCUGGCACUGGAACAGUCAGGGUGACCCAUUGCCUACCUCU
>ENSMUSG00000050240 hs-let-7a 1286 1293
UGAGGUAGUUGUAUAGUU&CUCACUGAACAUGGUGGGGAGCCUUCUGACCUUUGCUACCUCU
let-7a ENSRNOG0000001863 2000 nt UTR 3 hits 197 511 1139
 >ENSRNOG0000001863 hs-let-7a 197
                        204
UGAGGUAGUUGUAUAGUU&AGUCUGGCCCUCUGCAUGUGGUGCUGGUGACUACCCUCC
.((((((...(((...(((............))))))...))))...)))))...20.80
>ENSRNOG0000001863 hs-let-7a 511 518
```

UGAGGUAGUUGUAUAGUU&UAGCUGGCACUGGAACAGUCAGGGUGACCCAUUGCCUACCUCU >ENSRNOG00000001863 hs-let-7a 1139 1146 UGAGGUAGUAGGUUGUAUAGUU&UUCACUGAACAUGAUGGAGAGCCUUCUGACCUUUGCUACCUCU let-7a SINFRUG00000140659 2000 nt UTR 1 hits 1077 -----1-----1 >STNFRUG00000140659 hs-let-7a 1077 1084 UGAGGUAGUAGGUUGUAUAGUU&AACUAGAAGUCUAUUUAUAUAGGCUCCUAACCUUGCUACCUCU miRNA: let-7a Human predicted target: ENSG00000174437 Mouse predicted target: ENSMUSG00000029467 Rat predicted target: ENSRNOG0000001285 Fugu predicted target: SINFRUG00000134916 Hs Gene description: SARCOPLASMIC/ENDOPLASMIC RETICULUM CALCIUM ATPASE 2 (EC 3.6.3.8) (CALCIUM PUMP 2) (SERCA2) (SR CA(2+)-ATPASE 2) (CALCIUM-TRANSPORTING ATPASE SARCOPLASMIC RETICULUM TYPE, SLOW TWITCH SKELETAL MUSCLE ISOFORM) (ENDOPLASMIC RETICULUM CLASS 1/2 CA(2+) ATPASE). [Source:SWISSPROT; Acc:P16615] NM 001681 ENSG00000174437 2856 nt UTR 1 hits 490 let-7a ------1----1-----1

>ENSG00000174437 hs-let-7a 490 497

UGAGGUAGUAGGUUGUAUAGUU&CAUAAGCCAAUUUUUCUGCACUGAGCAGAGUCUUGCUACCUCAG	
(((((((((((((((((((((((((((((((((((((((27.00
let-7a ENSMUSG00000029467 2000 nt UTR 1 hits 642	
11	
>ENSMUSG00000029467 hs-let-7a 642 649	
UGAGGUAGUAGGUUGUAUAGUU&CAUAAGCCAAUUUUUCUGCACUGAGCAGAGUCCUGCUACCUCAG	
(((((((((((((((((((((((((((((((((((((((29.70
let-7a ENSRNOG0000001285 4048 nt UTR 1 hits 494	
1	
>ENSRNOG0000001285 hs-let-7a 494 501	
UGAGGUAGUAGGUUGUAUAGUU&CAUAAGCCAAUUUUUCUGCACUGAGCAGAGUCCUGCUACCUCAG	
(((((((((((((((((((((((((((((((((((((((29.70
let-7a SINFRUG00000134916 2000 nt UTR 1 hits 658	
1	
>SINFRUG00000134916 hs-let-7a 658 665	
UGAGGUAGUAGGUUGUAUAGUU&CAUUCUGUUUGUUUUCUGCAGUCGGCAGAGCACAGCUACCUCAA	
(((((((((((((())))))	20.90

miRNA: let-7a

Human predicted target: ENSG00000174498

Mouse predicted target: ENSMUSG00000032394

Rat predicted target: ENSRNOG00000013322 Fugu predicted target: SINFRUG00000135911 Hs Gene description: SIMILAR TO PUTATIVE NEURONAL CELL ADHESION MOLECULE. [Source:SPTREMBL;Acc:Q8IVU1] let-7a ENSG00000174498 2458 nt UTR 4 hits 452 534 685 762 >ENSG00000174498 hs-let-7a 452 459 >ENSG00000174498 hs-let-7a 534 541 UGAGGUAGUAGGUUGUAUAGUU&UCAGCCCCCUUACCCCACAGAGCCCGAAUGCACUCCUACCUCAA >ENSG00000174498 hs-let-7a 685 692 UGAGGUAGUAGGUUGUAUAGUU&AGCACUUCCCCAUUUCCAGAUGUGAAAGAAAAUGUCUACCUCAA >ENSG00000174498 hs-let-7a 762 769 UGAGGUAGUUGUAUAGUU&GACCUGCCUCCCGCCCCUCUGCCCACAGCCCACCUACCUCU let-7a ENSMUSG00000032394 2523 nt UTR 4 hits 388 468 633 714 >ENSMUSG00000032394 hs-let-7a 388 395 ((((((((...((((...((((&.............)))))...)))))...))))))>ENSMUSG00000032394 hs-let-7a 468 475

```
UGAGGUAGUAGGUUGUAUAGUU&CCUCCGCCUCUACCCCACAGAGCCCGAAAGCACUCCUACCUCAA
>ENSMUSG00000032394 hs-let-7a 633 640
UGAGGUAGUAGGUUGUAUAGUU&ACCACUGUCCCAACUCCAAGUGUGAAAGAAACUGUCUACCUCAG
>ENSMUSG00000032394 hs-let-7a 714
ENSRNOG00000013322 2000 nt UTR 4 hits 470 550 703 788
let-7a
 >ENSRNOG00000013322 hs-let-7a 470
                 477
>ENSRNOG00000013322 hs-let-7a
              550
                 557
UGAGGUAGUUGUAUAGUU&CCUCAGCCUCUACCCCACAGAGCCCGAAAGCACUCCUACCUCAA
>ENSRNOG00000013322 hs-let-7a 703
                 710
UGAGGUAGUAGGUUGUAUAGUU&ACCACUGUCCCAACUCCAAGUGUGAAAGAAACUGUCUACCUCAA
>ENSRNOG00000013322 hs-let-7a 788
                 795
SINFRUG00000135911 2000 nt UTR 3 hits 1368 1451 1562
let-7a
```

```
-----1---1---1
>SINFRUG00000135911 hs-let-7a 1368 1375
>SINFRUG00000135911 hs-let-7a 1451
                      1458
UGAGGUAGUAGGUUGUAUAGUU&ACUUCUCACCUUAAAUGACCAGAUCAGGCGCCGCGCUACCUCAG
>SINFRUG00000135911 hs-let-7a 1562 1569
UGAGGUAGUAGGUUGUAUAGUU&AACAUAAAGCACUUCCAAAUGCUGAAGUUAAUGUUCUACCUCAC
miRNA: mir-7
Human predicted target: ENSG00000139219
Mouse predicted target: ENSMUSG00000022483
Rat predicted target: ENSRNOG00000008809
Fugu predicted target: SINFRUG00000135764
Hs Gene description: COLLAGEN ALPHA 1(II) CHAIN PRECURSOR [CONTAINS:
CHONDROCALCIN]. [Source:SWISSPROT; Acc:P02458]
mir-7
     ENSG00000139219 2439 nt UTR 2 hits 217 2416
-----1-
>ENSG00000139219 hs-mir-7 217 224
UGGAAGACUAGUGAUUUUGUU&UGCAAAAUAAAAUCUCGGUGUUCUAUUUAUUUAUUGUCUUCCU
```

```
>ENSG00000139219 hs-mir-7 2416 2423
UGGAAGACUAGUGAUUUUGUU&GGCUGGCAGGUCUGUGCUCCCUGUGCCGCUUCCUUGUCUUCCU
mir-7 ENSMUSG00000022483 2205 nt UTR 2 hits 217 1514
-----1----1----1
>ENSMUSG00000022483 hs-mir-7 217 224
UGGAAGACUAGUGAUUUUGUU&UGCAAAAUAAAAUCUCGGUGUUCUAUUUAUUUAUUGUCUUCCU
>ENSMUSG00000022483 hs-mir-7 1514 1521
UGGAAGACUAGUGAUUUUGUU&CCUUCUGUAUUCCAUCCAGAUGAGGAAUGGAAAGUCUUCCC
mir-7 ENSRNOG00000008809 3494 nt UTR 2 hits 1271 1592
>ENSRNOG00000008809 hs-mir-7 1271 1278
UGGAAGACUAGUGAUUUUGUU&UGCAAAAUAAAAUCUCGAAGUUCUAUUUAUUUAUUGUCUUCCU
>ENSRNOG00000008809 hs-mir-7 1592 1599
UGGAAGACUAGUGAUUUUGUU&ACCCUGAGCAUCUCCUGCUACCCAAAAGGCUUGGGGUCUUCCU
SINFRUG00000135764 2000 nt UTR 1 hits 398
mir-7
```

>SINFRUG00000135764 hs-mir-7 398 405

UGGAAGACUAGUGAUUUUGUU&CAGGAAAUGAACUCAACUAAGAAACAUAAUACACAGUCUUCCAU miRNA: mir-9 Human predicted target: ENSG00000119547 Mouse predicted target: ENSMUSG00000045991 Rat predicted target: ENSRNOG00000018299 Fugu predicted target: SINFRUG00000154314 Hs Gene description: ONE CUT DOMAIN FAMILY MEMBER 2 (ONECUT-2 TRANSCRIPTION FACTOR) (OC-2). [Source:SWISSPROT; Acc: 095948] NM 004852 ENSG00000119547 2109 nt UTR 4 hits 1273 1296 1671 2033 ----1--->ENSG00000119547 hs-mir-9 1273 1280 UCUUUGGUUAUCUAGCUGUAUGA&AAAACAGCUGAAUACAUCUGGAGAAAACACAGCACCAAAGAA 21.66 >ENSG00000119547 hs-mir-9 1296 1303 UCUUUGGUUAUCUAGCUGUAUGA&AAAACACAGCACACCAAAGAAGCAGAAUACUGCAAACCAAAGAC 18,20 >ENSG00000119547 hs-mir-9 1671 1678 UCUUUGGUUAUCUAGCUGUAUGA&UUGAGACUGACUUUUUUUAUGAAUUACUUAGUCGAAACCAAAGAA 17.60 >ENSG00000119547 hs-mir-9 2033 2040

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UCUUUGGUUAUCUAGCUGUAUGA&CGGAACAGAGCAACAGAAACCUCAACAGCUACAAUACCAAAGAU
25.40
      ENSMUSG00000045991 2000 nt UTR 3 hits 1316 1339 1717
mir-9
   -----11-----1----
>ENSMUSG00000045991 hs-mir-9 1316
                       1323
UCUUUGGUUAUCUAGCUGUAUGA&AAUACAGCUGACAGAACCUGGAGAGAACACAGCACCAAAGAA
21.95
>ENSMUSG00000045991 hs-mir-9 1339 1346
UCUUUGGUUAUCUAGCUGUAUGA&AGAACACAGCACAAAGAAGCAGAAUACUGCAAACCAAAGAC
18,20
>ENSMUSG00000045991 hs-mir-9 1717 1724
UCUUUGGUUAUCUAGCUGUAUGA&UUGAGACUGACUUUUGUAUGAAUUGCUUAAUUGAAACCAAAGAA
18.50
mir-9
     ENSRNOG0000018299 2000 nt UTR 3 hits 1294 1318 1702
  -----11------1----
>ENSRNOG00000018299 hs-mir-9 1294 1301
UCUUUGGUUAUCUAGCUGUAUGA&AAAACAGCCGACGGAAUCUGGAGAGAACACAGCACCAAAGAA
19.50
>ENSRNOG00000018299 hs-mir-9 1318
                       1325
UCUUUGGUUAUCUAGCUGUAUGA&GAACACAGCACCAAAGAAGCAGAAAUUCUGCAAACCAAAGAU
```

```
17.81
>ENSRNOG00000018299 hs-mir-9 1702
                    1709
UCUUUGGUUAUCUAGCUGUAUGA&UUGAGACUGACUUUUGUAUGAAUUACUUAAUUGAAACCAAAGAA
16.70
mir-9
                        5 hits 527 549 1155 1622 1770
     SINFRUG00000154314 2000 nt UTR
   -----1----1----1
>STNFRUG00000154314 hs-mir-9 527
                     534
UCUUUGGUUAUCUAGCUGUAUGA&UCAAGUUUGGCGGAUGCACAGUCAGGAAUCACCAAACCAAAGC
>SINFRUG00000154314 hs-mir-9 549
                     556
>SINFRUG00000154314 hs-mir-9 1155 1162
UCUUUGGUUAUCUAGCUGUAUGA&UCCCCCAAGAUUCCUAUUUUAAUCACAGCAACAGCACCAAAGAA
((((((((.....)))))))).....)))))).....))))
21.10
>SINFRUG00000154314 hs-mir-9 1622 1629
UCUUUGGUUAUCUAGCUGUAUGA&CAUCCCUCACUCGAGCUAUAAACCAAAAGAAUCAAACCAAAGGA
17.20
>SINFRUG00000154314 hs-mir-9 1770
                    1777
UCUUUGGUUAUCUAGCUGUAUGA&CACUUGAGACUUUUUCUAUUUAUUGACAAAUCGAAACCAAAGAA
17.00
```

miRNA: mir-9 Human predicted target: ENSG00000119946 Mouse predicted target: ENSMUSG00000025189 Rat predicted target: ENSRNOG00000016302 Fugu predicted target: SINFRUG00000123133 Hs Gene description: CYCLIN M1; ANCIENT CONSERVED DOMAIN PROTEIN 1. [Source:RefSeq;Acc:NM 020348] mir-9 ENSG00000119946 4814 nt UTR 2 hits 901 3281 >ENSG00000119946 hs-mir-9 901 908 UCUUUGGUUAUCUAGCUGUAUGA&ACUGUAAGUGCUGAAAGCAAGUUUAGCCAUGACAAACCAAAGAG 19.10 >ENSG00000119946 hs-mir-9 3281 3288 UCUUUGGUUAUCUAGCUGUAUGA&AAGGAGUCCAAGUGGCAUGACUCUGGCAGUUUGCAACCAAAGGC 20.40 ENSMUSG00000025189 2710 nt UTR 1 hits 776 mir-9 -----1----->ENSMUSG00000025189 hs-mir-9 776 783 UCUUUGGUUAUCUAGCUGUAUGA&AUUGUAAGUUGUUAAAAUUUGUGUAGCCAUGAUAAACCAAAGAG 22.90

ENSRNOG00000016302 2000 nt UTR 1 hits 768 mir-9 >ENSRNOG00000016302 hs-mir-9 768 775 UCUUUGGUUAUCUAGCUGUAUGA&GAUUGUAAGUUGUUCAGUUUGUGUAGCCAUGAUAAACCAAAGAG 22.90 mir-9 SINFRUG00000123133 2000 nt UTR 1 hits 1622 ._____1____1_____1 >SINFRUG00000123133 hs-mir-9 1622 1629 UCUUUGGUUAUCUAGCUGUAUGA&AUGUUCACAGGUGGAGCCCUGAUGAAGUUAGAUGGACCAAAGU miRNA: mir-9 Human predicted target: ENSG00000157978 Mouse predicted target: ENSMUSG00000037295 Rat predicted target: ENSRNOG0000000151 Fugu predicted target: SINFRUG00000138412 Hs Gene description: LDL RECEPTOR ADAPTOR PROTEIN. [Source:RefSeq;Acc:NM 015627] NM 015627 mir-9 ENSG00000157978 3898 nt UTR 4 hits 45 355 588 2637 -1-----1----1----1-----1 >ENSG00000157978 hs-mir-9 45 52

```
UCUUUGGUUAUCUAGCUGUAUGA&GCCAGCCGGACACAAGCGGCCCUGACACGUGAUGGACCAAAGC
>ENSG00000157978 hs-mir-9 355
                     362
UCUUUGGUUAUCUAGCUGUAUGA&CAAGCUCUGCCCUGGCUGUGGGUAUCAGGACUGUGACCAAAGC
>ENSG00000157978 hs-mir-9 588
                     595
UCUUUGGUUAUCUAGCUGUAUGA&ACCCCAGGCUCUUAGAGACUAAGGGGCAGCUCCUGACCAAAGAC
25.30
>ENSG00000157978 hs-mir-9
                2637
                    2644
UCUUUGGUUAUCUAGCUGUAUGA&UUGGUAGAACACUUGUGCAUUCAGGUUAUCUCAGAACCAAAGGC
18.80
mir-9
     ENSMUSG00000037295 3630 nt UTR 4 hits 294 462 791 906
  -----1----1-----
>ENSMUSG00000037295 hs-mir-9
                  294
                      301
UCUUUGGUUAUCUAGCUGUAUGA&CAGUGCCCCCUCCUGCUGUGGGCGUCAGGACAAUGACCAAAGC
>ENSMUSG00000037295 hs-mir-9
                  462
                      469
UCUUUGGUUAUCUAGCUGUAUGA&CCGAGUAACUGAGGCUCUCAGAGAGGCCAGCCCCUGACCAAAGAC
23.80
>ENSMUSG00000037295 hs-mir-9 791
                      798
UCUUUGGUUAUCUAGCUGUAUGA&UCCAUUUUCUGCUUCCCCACAAUUCCUGGGAUGAUACCAAAGC
```

```
>ENSMUSG00000037295 hs-mir-9 906 913
mir-9
     ENSRNOG0000000151 2000 nt UTR 3 hits 310 478 917
 .-----1----1----1
>ENSRNOG0000000151 hs-mir-9 310
                    317
UCUUUGGUUAUCUAGCUGUAUGA&GAGCCAGUAUCCCCGCUGUGGGUGUCCAGACAAUGACCAAAGU
>ENSRNOG0000000151 hs-mir-9 478 485
UCUUUGGUUAUCUAGCUGUAUGA&CUGAGAAGCUGAGGCUUUCAAAGAGGCAGCCCCUGACCAAAGAC
22.80
>ENSRNOG0000000151 hs-mir-9 917
                    924
UCUUUGGUUAUCUAGCUGUAUGA&GGGCGGUGGAGUUGAGAAUAGAACCCAGAUCUGAUACCAAAGC
SINFRUG00000138412 2000 nt UTR 1 hits 1856
mir-9
1----
>SINFRUG00000138412 hs-mir-9 1856
                    1863
UCUUUGGUUAUCUAGCUGUAUGA&CAGCGCUCCCGCUAGCAGGGCCAAACAGCCGACGAACCAAAGAC
24.30
```

Human predicted target: ENSG00000137104 Mouse predicted target: ENSMUSG00000036073 Rat predicted target: ENSRNOG0000014766 Fugu predicted target: SINFRUG00000126591 Hs Gene description: GALACTOSE-1-PHOSPHATE URIDYLYLTRANSFERASE (EC 2.7.7.10). [Source:SWISSPROT; Acc: P07902] NM 147132 mir-18 ENSG00000137104 2000 nt UTR 1 hits 1437 -----1----1 >ENSG00000137104 hs-mir-18 1437 1444 mir-18 ENSMUSG00000036073 2000 nt UTR 1 hits 1534 -----1-----1 >ENSMUSG00000036073 hs-mir-18 1534 1541 mir-18 ENSRNOG00000014766 2000 nt UTR 1 hits 1591 ------1----1----1 >ENSRNOG00000014766 hs-mir-18 1591 1598

SINFRUG00000126591 2000 nt UTR 1 hits 975

mir-18

	1
>SINFRUG00	000126591 hs-mir-18 975 982
UAAGGUGCAU	CUAGUGCAGAUA&GACGUCCCCAGGAAGGCCAACUCUCAGCACUGCAGCACCUUC
.(((((.((((((()).)))))))))))23.10
miRNA: mir	· - 18
Human pred	licted target: ENSG0000146830
Mouse pred	licted target: ENSMUSG0000029714
Rat predic	ted target: ENSRNOG0000001410
Fugu predi	cted target: SINFRUG00000150734
	escription: PERQ AMINO ACID RICH WITH GYF DOMAIN PROTEIN 1.
mir-18	ENSG00000146830 3237 nt UTR 1 hits 143
_	
>ENSG00000	146830 hs-mir-18 143 150
UAAGGUGCAU	CUAGUGCAGAUA&GGCGGGGUCCCCAGCACUUGUUACAAACACACGAUGCACCUUAA
(((((((((.(((((&))))))))))))))))
mir-18	ENSMUSG00000029714 2368 nt UTR 1 hits 161
1	
>ENSMUSG00	0000029714 hs-mir-18 161 168
UAAGGUGCAU	CUAGUGCAGAUA&GCAGGGUCCCCAGCACUUGUUACAAACCACACGAUGCACCUUAA
(((((((((.(((((&))))))))))))))))

miRNA: mir-19a

Human predicted target: ENSG00000069345

Mouse predicted target: ENSMUSG00000031701

Rat predicted target: ENSRNOG00000016251

Fugu predicted target: SINFRUG00000132559

Hs Gene description: DNAJ HOMOLOG SUBFAMILY A MEMBER 2 (HIRA INTERACTING PROTEIN 4) (CELL CYCLE PROGRESSION RESTORATION GENE 3 PROTEIN) (DNJ3). [Source:SWISSPROT;Acc:O60884] NM 005880

mir-19a ENSG00000069345 2646 nt UTR 1 hits 471

-----1------1

>ENSG00000069345 hs-mir-19a 471 478

UGUGCAAAUCUAUGCAAAACUGA&GUAUCUAUCAUUUAGAUGCAUGGAAAAAAAUGGGCUUUGCACAC

```
22.60
mir-19a
     ENSMUSG00000031701 3576 nt UTR 1 hits 446
  -----1----1
>ENSMUSG00000031701 hs-mir-19a
                  446
                      453
UGUGCAAAUCUAUGCAAAACUGA&CUGUAUCUAUCAUUUAGAUGCAUGGAAAAAUGGGCUUUGCACAC
22.80
mir-19a
    ENSRNOG00000016251 3498 nt UTR 1 hits 445
>ENSRNOG00000016251 hs-mir-19a
                  445
UGUGCAAAUCUAUGCAAAACUGA&CCUGUAUCUAUCAUUAGAUGCAUGGAAAACUGGGCUUUGCACAC
22.90
mir-19a
    SINFRUG00000132559 2000 nt UTR 1 hits 209
-----1----1-----
>SINFRUG00000132559 hs-mir-19a
                  209
                      216
UGUGCAAAUCUAUGCAAAACUGA&UGAGAAACUCGCACGGGGACAGCCAGAUGCAAGGUUUUGCACU
```

miRNA: mir-19a

Human predicted target: ENSG00000081479

Mouse predicted target: ENSMUSG00000027069

```
Rat predicted target: ENSRNOG00000006837
Fugu predicted target: SINFRUG00000140256
Hs Gene description: LOW-DENSITY LIPOPROTEIN RECEPTOR-RELATED PROTEIN 2
PRECURSOR (MEGALIN) (GLYCOPROTEIN 330) (GP330).
[Source:SWISSPROT; Acc: P98164]
mir-19a ENSG00000081479 2000 nt UTR 2 hits 38 209
>ENSG00000081479 hs-mir-19a 38 45
UGUGCAAAUCUAUGCAAAACUGA&AUACCAGCUAUUUAGGGAAUAAUUAGAAACACUUUUGCACAU
15.66
>ENSG00000081479 hs-mir-19a
                    209
                        216
UGUGCAAAUCUAUGCAAAACUGA&UACAAAUAAUUAUCACAAUGUACUAUAUGUAUAUCUUUGCACU
mir-19a ENSMUSG00000027069 2094 nt UTR 2 hits 38 1972
_1______
____1___
>ENSMUSG00000027069 hs-mir-19a 38
                           45
UGUGCAAAUCUAUGCAAAACUGA&UUGCCAACUCUCUAGGGAACAUUUAGACACUCACUUUUGCACAU
15.06
>ENSMUSG00000027069 hs-mir-19a 1972
                          1979
UGUGCAAAUCUAUGCAAAACUGA&GAACAUUCUUGUUUCAGAAAAAGGUGAAGAGCUCCUUUGCACAG
17.90
mir-19a
      ENSRNOG0000006837 2097 nt UTR 3 hits 41 673 1690
```

-111111
>ENSRNOG0000006837 hs-mir-19a 41 48
UGUGCAAAUCUAUGCAAAACUGA&UCGCCAGCUCUCUAGGGAACAUUUAGACACUCACUUUUGCACAU
((((((((((((((((((((((((((((((((((((((
>ENSRNOG0000006837 hs-mir-19a 673 680
UGUGCAAAUCUAUGCAAAACUGA&UUGAUUGUGCUUCGUCCCUAGUUGCCAAGUCAACAUUUGCACC
.((((((((((((((((((((((((((((((((((((((
>ENSRNOG0000006837 hs-mir-19a 1690 1697
UGUGCAAAUCUAUGCAAAACUGA&GAACAUUCUUGUUUCAGAAAAAGGUGGAGAGUCCCUUUGCACAA
((((((((((((((((((((((((((((((((((((((
mir-19a SINFRUG00000140256 2000 nt UTR 2 hits 46 223
-11
>SINFRUG00000140256 hs-mir-19a 46 53
UGUGCAAAUCUAUGCAAAACUGA&GCCAGAGACGGGAAUCGAAAGCAGAAGAGACACACUUUGCACAG
((((((((((((((
>SINFRUG00000140256 hs-mir-19a 223 230
UGUGCAAAUCUAUGCAAAACUGA&UGUUUUCUAUUACUCUGAUGUACUAUGUGUAUAUCUUUGCACU
.((((((((((((((((((((((((((((((((((((((

miRNA: mir-19a

Human predicted target: ENSG00000113300

```
Mouse predicted target: ENSMUSG00000020362
Rat predicted target: ENSRNOG00000002803
Fugu predicted target: SINFRUG00000136719
Hs Gene description: KIAA1194. [Source:RefSeq; Acc: NM 015455] NM 015455
mir-19a
      ENSG00000113300 2000 nt UTR 2 hits 219 615
>ENSG00000113300 hs-mir-19a 219 226
UGUGCAAAUCUAUGCAAAACUGA&AAUAUGCUUUAUACUGCUAGACAGGGAUUGGUGUUUUGCACC
>ENSG00000113300 hs-mir-19a
                   615
                       622
UGUGCAAAUCUAUGCAAAACUGA&UAAAAGAAGCUGCAACAGACUUUCUCUGCUCAUGAUUUGCACU
mir-19a
      ENSMUSG00000020362 5687 nt UTR 2 hits 309 607
>ENSMUSG00000020362 hs-mir-19a 309 316
UGUGCAAAUCUAUGCAAAACUGA&GCCUUGAAAUAGGAAGAUGUGUGAGCAGUGUGCUGUUUGCACAG
22.10
>ENSMUSG00000020362 hs-mir-19a 607 614
UGUGCAAAUCUAUGCAAAACUGA&GGUAACAAAGCUGCAUCCGACUUUCUCUGCAGUGAUUUGCACU
ENSRNOG00000002803 2000 nt UTR 2 hits 319 611
mir-19a
```

```
>ENSRNOG00000002803 hs-mir-19a 319
                    326
UGUGCAAAUCUAUGCAAAACUGA&UGCCUUGAAAUAGGAAGAUGUGUGAACAGUGUGUGUUUGCACAG
20.20
>ENSRNOG00000002803 hs-mir-19a 611
                    618
UGUGCAAAUCUAUGCAAAACUGA&GGUAACAAAGUUGCAUCAGACUUUCUCUGCAGUGAUUUGCACU
mir-19a
    SINFRUG00000136719 2000 nt UTR 2 hits 196 1751
>SINFRUG00000136719 hs-mir-19a 196
                    203
((((((((.....)))))))).....)))))).....))))
17.32
>SINFRUG00000136719 hs-mir-19a 1751
                    1758
UGUGCAAAUCUAUGCAAAACUGA&UUUCCUGGCCCGGACGGGUAGCAUCGCUCGCUUCGUUUGCACAU
19.00
```

miRNA: mir-19a

Human predicted target: ENSG00000164463

Mouse predicted target: ENSMUSG00000048249

Rat predicted target: ENSRNOG00000020769

Fugu predicted target: SINFRUG00000139862

```
Hs Gene description: ADULT RETINA PROTEIN. [Source:RefSeq; Acc:NM 153607]
  NM 153607
mir-19a ENSG00000164463 5222 nt UTR 2 hits 959 4350
 >ENSG00000164463 hs-mir-19a 959
                   966
UGUGCAAAUCUAUGCAAAACUGA&CAACUGAUAUGGCAAACUGCCAGUCUAAGUAAAGUUUUGCACAG
21.30
>ENSG00000164463 hs-mir-19a 4350
                   4357
UGUGCAAAUCUAUGCAAAACUGA&ACCAUUUCCCAUGGAACUGAGGCCAUUUCCACAACUUUGCACAG
16.75
mir-19a ENSMUSG00000048249 2000 nt UTR 1 hits 991
>ENSMUSG00000048249 hs-mir-19a 991 998
UGUGCAAAUCUAUGCAAAACUGA&CAACUGGUAUGGCAGACUGCCAGUCUAAGUAAAGUUUUGCACAG
21.30
mir-19a
     ENSRNOG00000020769 3521 nt UTR 2 hits 999 2340
------
>ENSRNOG00000020769 hs-mir-19a
                 999
                    1006
UGUGCAAAUCUAUGCAAAACUGA&CAACUGGUAUGGCAGACUGCCAGUCUAAGUAAAGUUUUGCACAG
21.30
```

>ENSRNOG00000020769 hs-mir-19a 2340 2347 UGUGCAAAUCUAUGCAAAACUGA&CAACUGGUAUGGCAGACUGCCAGUCUAAGUAAAGUUUUGCACAG 21.30 mir-19a SINFRUG00000139862 2000 nt UTR 2 hits 1514 1592 ------1--1----->SINFRUG00000139862 hs-mir-19a 1514 1521 UGUGCAAAUCUAUGCAAAACUGA&AGAUAUUUUGUUUAAAGUUACAGAAAAAAAAAUAUUUGCACAC 16.65 >SINFRUG00000139862 hs-mir-19a 1592 UGUGCAAAUCUAUGCAAAACUGA&GCAACGAAAUGGCGACCAGCCAGUUAAAGUAAGGUUUUGCACAG 22.60 miRNA: mir-19a Human predicted target: ENSG00000171150 Mouse predicted target: ENSMUSG00000037104

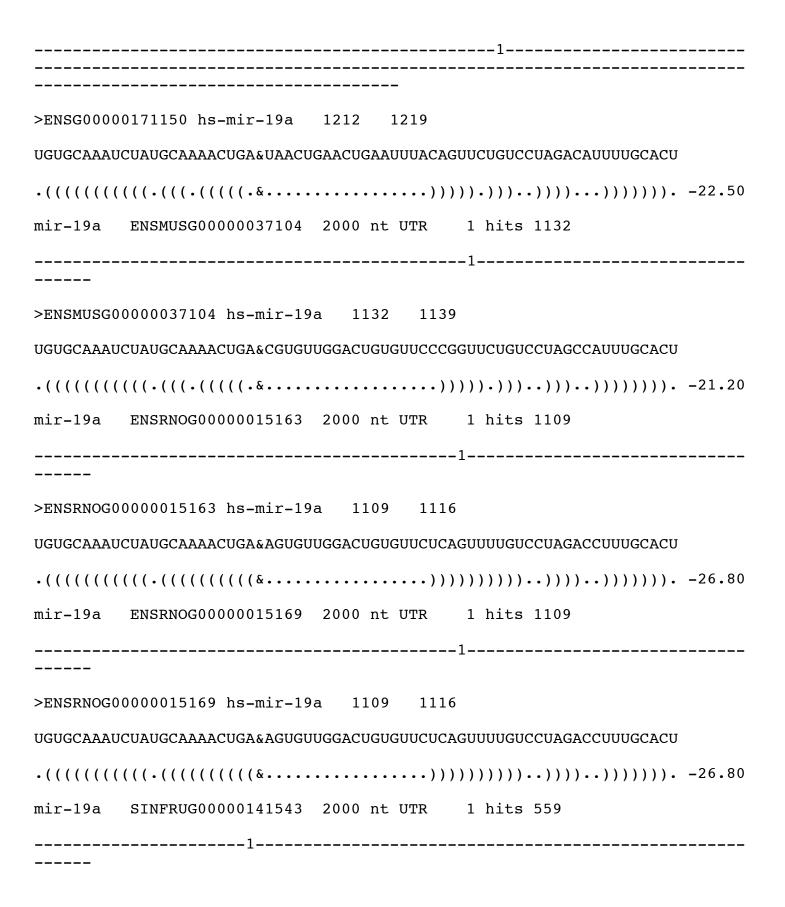
Rat predicted target: ENSRNOG00000015163

Rat predicted target: ENSRNOG00000015169

Fugu predicted target: SINFRUG00000141543

Hs Gene description: CYTOKINE INDUCIBLE SH2-CONTAINING PROTEIN 5 (SUPPRESSOR OF CYTOKINE SIGNALING 5) (SOCS-5) (CYTOKINE-INDUCIBLE SH2 PROTEIN 6) (CIS-6). [Source:SWISSPROT; Acc: 075159] NM 014011

ENSG00000171150 4640 nt UTR 1 hits 1212 mir-19a



```
>SINFRUG00000141543 hs-mir-19a 559
                            566
UGUGCAAAUCUAUGCAAAACUGA&GACGGCGCUACACCAGGCACAGUCGUUGCUCUUUUUUGCACAC
miRNA: mir-20
Human predicted target: ENSG00000109189
Mouse predicted target: ENSMUSG00000048255
Rat predicted target: ENSRNOG00000002106
Fugu predicted target: SINFRUG00000123610
Hs Gene description: NM 022832
mir-20
       ENSG00000109189
                     4611 nt UTR 3 hits 1488 1789 3367
  -----1--
>ENSG00000109189 hs-mir-20 1488
                         1495
UAAAGUGCUUAUAGUGCAGGUAG&AUGUUAGUGGCCAUUUUGCAACAAUGAAGAGGAUAGCACUUUAU
(((((((((....))))))....))))....)))))....
19.21
>ENSG00000109189 hs-mir-20
                    1789
                         1796
UAAAGUGCUUAUAGUGCAGGUAG&CUGGAAGGUGAGUUUUGAUCUCUUUUUAAGGAGAGGCACUUUC
>ENSG00000109189 hs-mir-20 3367
                         3374
UAAAGUGCUUAUAGUGCAGGUAG&CUGUACCUUAAUUUUUUAAAAUGUAACCAAUUCAAGCACUUUAA
```

20.01

```
ENSMUSG00000048255 3996 nt UTR 2 hits 1538 1839
mir-20
>ENSMUSG00000048255 hs-mir-20 1538 1545
UAAAGUGCUUAUAGUGCAGGUAG&UCAUCAGUGGCCAUCGUGCAGCAGUGAAGAGGAUAGCACUUUAU
19.00
>ENSMUSG00000048255 hs-mir-20 1839 1846
UAAAGUGCUUAUAGUGCAGGUAG&UACAUGGAUGGUGAACCUUCAUUCUUUAAGGAGAGGCACUUUU
mir-20
      ENSRNOG0000002106 3862 nt UTR 2 hits 1404 1704
          -----1----1----1
>ENSRNOG00000002106 hs-mir-20 1404 1411
UAAAGUGCUUAUAGUGCAGGUAG&AUGUCAGUGGCCAUUUUGCAGCAACGAAGAGGAUAGCACUUUAU
18.11
>ENSRNOG00000002106 hs-mir-20 1704
                       1711
UAAAGUGCUUAUAGUGCAGGUAG&UACGUUGGAGGUGAACCUUCAUUCUUCGAGGAGAGGCACUUUU
SINFRUG00000123610 2000 nt UTR 2 hits 129 1490
mir-20
>SINFRUG00000123610 hs-mir-20 129
                        136
```

UAAAGUGCUUAUAGUGCAGGUAG&UGUCCUCUUGCCUUUCUGUCACCUGCAUCUGGACUGCACUUUAA

```
28.80
>SINFRUG00000123610 hs-mir-20
                     1490 1497
UAAAGUGCUUAUAGUGCAGGUAG&GAGAGCUGCAGUCUGGUGGGCUGUGACCUACGGGGGCACUUUAA
21.00
miRNA: mir-20
Human predicted target: ENSG00000134323
Mouse predicted target: ENSMUSG00000037169
Rat predicted target: ENSRNOG00000006308
Fugu predicted target: SINFRUG00000128278
Hs Gene description: N-MYC PROTO-ONCOGENE PROTEIN.
[Source:SWISSPROT; Acc:P04198]
mir-20
      ENSG00000134323
                   2907 nt UTR 1 hits 859
 _____1
>ENSG00000134323 hs-mir-20 859
                        866
UAAAGUGCUUAUAGUGCAGGUAG&CUUCAAAAUGUAUAUUUAGUGCUGCAUCUUAUAGCACUUUGA
24.80
mir-20
      ENSMUSG00000037169 2911 nt UTR 1 hits 861
 -----1
                      861
>ENSMUSG00000037169 hs-mir-20
                          868
UAAAGUGCUUAUAGUGCAGGUAG&CUUCAAAAUGUAUAUUUAGUGCUGCACCUUAGAGCACUUUGA
```

```
26.30
     ENSRNOG00000006308 2915 nt UTR 3 hits 864 1794 2048
mir-20
 -----1--
>ENSRNOG00000006308 hs-mir-20 864
UAAAGUGCUUAUAGUGCAGGUAG&UCAAAAUGUGUAUAUUUUAGUGCUGCACCUUAGAGCACUUUGA
26.30
>ENSRNOG0000006308 hs-mir-20 1794 1801
UAAAGUGCUUAUAGUGCAGGUAG&UCAAAAUGUGUAUAUAUUUAGUGCUGCACCUUAGAGCACUUUGA
26.30
>ENSRNOG00000006308 hs-mir-20
                 2048
                     2055
UAAAGUGCUUAUAGUGCAGGUAG&AGCUAUUUUCAAUAGGAAUUCAAUGGGUGGUAAAAGCACUUUU
mir-20
     SINFRUG00000128278 2000 nt UTR 2 hits 509 1268
.-----1----1-----1
>SINFRUG00000128278 hs-mir-20
                  509
                      516
UAAAGUGCUUAUAGUGCAGGUAG&CACCAGCCUGGAAAUCAGGGACAGGGUGUCAGAGGGCACUUUGC
19.91
>SINFRUG00000128278 hs-mir-20 1268
                     1275
UAAAGUGCUUAUAGUGCAGGUAG&ACUUUUAAAAUGUACAUUUAGUGCUGCAACUCAUAGCACUUUU
```

miRNA: mir-23a Human predicted target: ENSG00000104725 Mouse predicted target: ENSMUSG00000022055 Rat predicted target: ENSRNOG00000013658 Fugu predicted target: SINFRUG00000121670 Hs Gene description: NEUROFILAMENT TRIPLET L PROTEIN (68 KDA NEUROFILAMENT PROTEIN) (NEUROFILAMENT LIGHT POLYPEPTIDE) (NF-L). [Source:SWISSPROT; Acc:P07196] mir-23a ENSG00000104725 3852 nt UTR 1 hits 264 >ENSG00000104725 hs-mir-23a 264 271 AUCACAUUGCCAGGGAUUUCC&GCAUGGACCACGCUUAUGAGUUCAGGAUCUACGGCAAUGUGAA mir-23a ENSMUSG00000022055 2327 nt UTR 1 hits 256 -----1----1---------->ENSMUSG00000022055 hs-mir-23a 256 263 AUCACAUUGCCAGGGAUUUCC&GCAUGGUCCAUGCUUAUGAGUUCAGGAUCUAUGGCAAUGUGAA mir-23a ENSRNOG00000013658 2335 nt UTR 1 hits 262 -----1----1-----

>ENSRNOG00000013658 hs-mir-23a 262 269

AUCACAUUGCCAGGGAUUUCC&GCAUGGUCCAUGCUUAUGAGUUCAGGAUCUACGGCAAUGUGAA

```
mir-23a
      SINFRUG00000121670 2000 nt UTR 1 hits 1308
>SINFRUG00000121670 hs-mir-23a 1308
                          1315
AUCACAUUGCCAGGGAUUUCC&GAGGGGGAAGAGCUGCAAUCCUAUUGUUUUAUGGUAAUGUGAUU
miRNA: mir-23a
Human predicted target: ENSG00000137942
Mouse predicted target: ENSMUSG00000039735
Rat predicted target: ENSRNOG00000013798
Fugu predicted target: SINFRUG00000120809
Hs Gene description: NM 017737
mir-23a
      ENSG00000137942 4245 nt UTR 3 hits 1740 1829 2769
1-----1
>ENSG00000137942 hs-mir-23a 1740 1747
AUCACAUUGCCAGGGAUUUCC&UUAGAUAUUGAAUCUCGUUACAGGGUUAUUUAUAUAUAUGUGAC
>ENSG00000137942 hs-mir-23a 1829
                        1836
AUCACAUUGCCAGGGAUUUCC&GCUAUUUUUAUUUUAAAGGUUAGCAAUGAGGAGGAAAUGUGAUC
>ENSG00000137942 hs-mir-23a 2769
                        2776
```

AUCACAUUGCCAGGGAUUUCC&UCUAAUUUCAGAAGAUUCACCUUUUAAAAAAUGCAAAUGUGAA		
.((((((((((((((((((((((((((((((((((((((
mir-23a ENSMUSG00000039735 5380 nt UTR 5 hits 1902 2621 2876 2965 3441		
>ENSMUSG0000039735 hs-mir-23a 1902 1909		
AUCACAUUGCCAGGGAUUUCC&UCUGCUCUAGCCUGCAGCCCAGUUACCGACUCUGAAAUGUGAC		
.(((((((((((())))))		
>ENSMUSG00000039735 hs-mir-23a 2621 2628		
AUCACAUUGCCAGGGAUUUCC&CGUUUGGUUCUUUACUGUUGUGAGGGGAGAAAGAGAAUGUGAA		
.(((((((()((&)))		
>ENSMUSG0000039735 hs-mir-23a 2876 2883		
AUCACAUUGCCAGGGAUUUCC&UUAGAUAUUAAAUCUCGUUACAGGGUUAUUUAUAUAUAUGUGAC		
.((((((((((((((((((((((((((((((((((((((
>ENSMUSG0000039735 hs-mir-23a 2965 2972		
AUCACAUUGCCAGGGAUUUCC&GCUAUUUUUAUUUCAAAAGUUAGCAAUGAGAAAGGAAAUGUGAC		
.((((((((()))))))))15.20		
>ENSMUSG00000039735 hs-mir-23a 3441 3448		
AUCACAUUGCCAGGGAUUUCC&CUGCUGCAAACCAAAGAGACUCGGAGCACCUUAAAUGUGAUA		
((((((((((((())))))))))))))))		
mir-23a ENSRNOG00000013798 5105 nt UTR 5 hits 1674 2358 2612 2701 4695		
11		

>ENSRNOG00000013798 hs-mir-23a 1674 1681
AUCACAUUGCCAGGGAUUUCC&UGCUCUAGCCUGCAGCCCAGUUAAAGACUCUGUGAAAUGUGAC
.(((((((((((((((
>ENSRNOG00000013798 hs-mir-23a 2358 2365
AUCACAUUGCCAGGGAUUUCC&AAUUUGGUUCUUUACUGUUUUGGGGGGAGAAGAACAAUGUGAA
.((((((((()
>ENSRNOG00000013798 hs-mir-23a 2612 2619
AUCACAUUGCCAGGGAUUUCC&UUAGAUAUUAAAUCUCGUUACAGGGUUAUUUAUAUAUAUGUGAC
.((((((((((((((((((((((((((((((((((((((
>ENSRNOG00000013798 hs-mir-23a 2701 2708
AUCACAUUGCCAGGGAUUUCC&GCUAUUUUUAUUUCAGAAGUUAGCAAUGAGAAGGAAAUGUGAC
.(((((((((((((()))))))))))))))
>ENSRNOG0000013798 hs-mir-23a 4695 4702
AUCACAUUGCCAGGGAUUUCC&UGCUCUAGCCUGCAGCCCAGUUAAAGACUCUGUGAAAUGUGAC
.((((((((((((((
mir-23a SINFRUG00000120809 2000 nt UTR 1 hits 979
1
>SINFRUG00000120809 hs-mir-23a 979 986
AUCACAUUGCCAGGGAUUUCC&UUGUGGAAAUCUAAAAACAAACUUGGGAAACCCUGAAUGUGAG
.(((((((((((((())))))))))))))))

miRNA: mir-23a

Human predicted target: ENSG00000151615 Mouse predicted target: ENSMUSG00000031688 Rat predicted target: ENSRNOG00000012167 Fugu predicted target: SINFRUG00000126552 Hs Gene description: POU DOMAIN, CLASS 4, TRANSCRIPTION FACTOR 2 (BRAIN-SPECIFIC HOMEOBOX/POU DOMAIN PROTEIN 3B) (BRN-3B). [Source:SWISSPROT; Acc:Q12837] NM 004575 ENSG00000151615 3663 nt UTR 4 hits 102 173 463 1665 mir-23a >ENSG00000151615 hs-mir-23a 102 109 AUCACAUUGCCAGGGAUUUCC&CUUUUCACUUUUGGCGACUAGAAACAAUUCCAGUAAAUGUGAA >ENSG00000151615 hs-mir-23a 173 180 AUCACAUUGCCAGGGAUUUCC&GCGAACGAGCGAACAACUGAGCCCAAGCCGGUGAGAAUGUGAA >ENSG00000151615 hs-mir-23a 463 470 AUCACAUUGCCAGGGAUUUCC&UUCAGGACUAAAACUUUAAACUAGAGUUGAUGCUUAAUGUGAUA >ENSG00000151615 hs-mir-23a 1665 1672 AUCACAUUGCCAGGGAUUUCC&AUUAAAAUAUGCUAUUAAAAUUAAAAUGGCUUUUAAAAUGUGAUG ENSMUSG00000031688 2000 nt UTR 2 hits 113 490 mir-23a

>ENSMUSG00000031688 hs-mir-23a 113 120

AUCACAUUGCCAGGGAUUUCC&CUUUCUACUUUGGCUAUCAGAAAACAAUUCCGGUAAAUGUGAA
.(((((((((((((((()))))))))))))))
>ENSMUSG0000031688 hs-mir-23a 490 497
AUCACAUUGCCAGGGAUUUCC&UUCAGGACUGAAACUCGAAGCUAGAGUUGAUGCUUAAUGUGAUA
(((((((((((((((((((((((((((((((((((((((
mir-23a ENSRNOG00000012167 3709 nt UTR 2 hits 114 489
1
-
>ENSRNOG0000012167 hs-mir-23a 114 121
AUCACAUUGCCAGGGAUUUCC&UCUUUCUACUUUGGCUAUCAGAAACAAUUCCGGUAAAUGUGAA
.(((((((((((((((()))))))))))))))
>ENSRNOG0000012167 hs-mir-23a 489 496
AUCACAUUGCCAGGGAUUUCC&UUCAGGACUGAAACUCGAAGCUAGAGUUGAUGCUUAAUGUGAC
.(((((((((((((())))))))))))))))))))))))))
mir-23a SINFRUG00000126552 2000 nt UTR 2 hits 646 1730
111111
>CINEDUC00000126552 ha min 220 646 652
>SINFRUG00000126552 hs-mir-23a 646 653
AUCACAUUGCCAGGGAUUUCC&CUUUUGCCCGUCACGCACGUCAUUUUGUGUCCAAAAAUGUGAUC
(((((((((((())))))))))))))
>SINFRUG00000126552 hs-mir-23a 1730 1737
AUCACAUUGCCAGGGAUUUCC&CCCGCUUGCACGCGUGGCCACUUUUUCAGACCUGAAAUGUGAG
.(((((((((&)))))))))

miRNA: mir-24 Human predicted target: ENSG00000174151 Mouse predicted target: ENSMUSG00000050639 Rat predicted target: ENSRNOG00000019777 Fugu predicted target: SINFRUG00000125370 mir-24 ENSG00000174151 4596 nt UTR 4 hits 1364 1941 2867 4204 -----1----1 -----1------>ENSG00000174151 hs-mir-24 1364 1371 UGGCUCAGUUCAGCAGGAACAG&GGAUCUCCCUAGAUCAUGGCAAGGCCUGACAACAGCUGAGCCAG >ENSG00000174151 hs-mir-24 1941 1948 UGGCUCAGUUCAGCAGGAACAG&CUUGCUCUAAGAGCAGCAGGCAAUGCCGUAAAGCCUGAGCCU >ENSG00000174151 hs-mir-24 2867 2874 UGGCUCAGUUCAGCAGGAACAG&CCCAAGCCCCGUCUUUUCUGUAACCACCCCUCCUCUGAGCCC >ENSG00000174151 hs-mir-24 4204 4211 UGGCUCAGUUCAGCAGGAACAG&AGGUGGUAUUAUUAUGUUCUUGUCCUUCUCUUUCACUGAGCCAG ENSMUSG00000050639 2942 nt UTR 3 hits 114 1727 2820 mir-24 .----1----

>ENSMUSG00000050639 hs-mir-24 114 121

```
UGGCUCAGUUCAGCAGGAACAG&CACUUCAGAAGUAGAUUUUUUGCACUUCAUGGCUGAGCCAC
>ENSMUSG00000050639 hs-mir-24 1727 1734
UGGCUCAGUUCAGCAGGAACAG&CUUGUUCUCAGAGCACAGAGGCGAUGCCAGAAAGCCUGAGCCU
>ENSMUSG00000050639 hs-mir-24 2820 2827
UGGCUCAGUUCAGCAGGAACAG&UUUAAACCUCGCUGUGGGAGAUCCAGGCAUCCUCCCUGAGCCAG
mir-24 ENSRNOG00000019777 2000 nt UTR 2 hits 112 1226
>ENSRNOG00000019777 hs-mir-24 112 119
UGGCUCAGUUCAGCAGGAACAG&CACUUCAGAAGUAGAUGCAUUUUUGCACUUCAUGGCUGAGCCAC
>ENSRNOG00000019777 hs-mir-24 1226 1233
UGGCUCAGUUCAGCAGGAACAG&UGGGCCCUCUGGAUCCUAAUAAGGACUGAAGACUGCUGAGCCAG
mir-24
     SINFRUG00000125370 889 nt UTR 1 hits 356
-----1------
>SINFRUG00000125370 hs-mir-24 356 363
UGGCUCAGUUCAGCAGGAACAG&AGUCUGGAAAACAGAUUUAUUGUUGCUGUUUUGAGCUGAGCCC
```

```
Human predicted target: ENSG00000179905
Mouse predicted target: ENSMUSG00000049932
Rat predicted target: ENSRNOG00000010386
Fugu predicted target: SINFRUG00000150234
Hs Gene description: HISTONE H2A.X (H2A/X). [Source:SWISSPROT;Acc:P16104]
   NM 002105
mir-24 ENSG00000179905 2000 nt UTR 2 hits 154 1037
>ENSG00000179905 hs-mir-24 154
                       161
UGGCUCAGUUCAGCAGGAACAG&CCUUUUAAGGGCCACCACCGCCCUCAUGGAAAGAGCUGAGCCGC
>ENSG00000179905 hs-mir-24 1037 1044
UGGCUCAGUUCAGCAGGAACAG&AGAUACCAGCACAAGUCGGUUAAUCCCUGUCUGGACUGAGCCU
ENSMUSG00000049932 2878 nt UTR 3 hits 85 766 1780
mir-24
           >ENSMUSG00000049932 hs-mir-24 85 92
UGGCUCAGUUCAGCAGGAACAG&CCUUUUAAGGGCCACCACCUCCCUCACAGAAAGAGCUGAGCCAC
>ENSMUSG00000049932 hs-mir-24 766 773
UGGCUCAGUUCAGCAGGAACAG&AGAUACCAGCACAAGCCGGUGAAUCCCUGUCUGGACUGAGCCU
>ENSMUSG00000049932 hs-mir-24 1780 1787
```

```
UGGCUCAGUUCAGCAGGAACAG&CUGGAUGGUGGCCUGCAUAGUCUCUUGCAUGCUAUCUGAGCCAU
mir-24
     ENSRNOG00000010386 2000 nt UTR 3 hits 87 737 1772
>ENSRNOG00000010386 hs-mir-24
                      94
                  87
UGGCUCAGUUCAGCAGGAACAG&CCUUUUAAGGGCCACCACCUCCCUCACAGAAAGAGCUGAGCCAC
>ENSRNOG00000010386 hs-mir-24 737 744
UGGCUCAGUUCAGCAGGAACAG&AGAUACCAGCACAAGUCGGUGAAUCCCUGUCUGGACUGAGCCU
>ENSRNOG00000010386 hs-mir-24 1772 1779
UGGCUCAGUUCAGCAGGAACAG&CUGGAUGGUGGCCUGCAUGGUCUCUUGCAUGCUAUCUGAGCCAU
SINFRUG00000150234 2000 nt UTR 2 hits 436 1228
  -----1----1-----1
>SINFRUG00000150234 hs-mir-24 436
                     443
UGGCUCAGUUCAGCAGGAACAG&UUGCGGUUGAGGCCUACAUGAACACCAACGGCUCUGAGCCC
>SINFRUG00000150234 hs-mir-24 1228
                     1235
UGGCUCAGUUCAGCAGGAACAG&UAGUGGCAAAAGCAGCAUGACACAUUGGGUUUGAACUGAGCCC
```

Human predicted target: ENSG00000099822 Mouse predicted target: ENSMUSG00000020331 Rat predicted target: ENSRNOG00000008831 Fugu predicted target: SINFRUG00000153577 Hs Gene description: POTASSIUM/SODIUM HYPERPOLARIZATION-ACTIVATED CYCLIC NUCLEOTIDE-GATED CHANNEL 2 (BRAIN CYCLIC NUCLEOTIDE GATED CHANNEL 2) (BCNG-2). [Source:SWISSPROT; Acc: Q9UL51] NM 001194 mir-25 ENSG00000099822 2000 nt UTR 1 hits 391 >ENSG00000099822 hs-mir-25 391 398 CAUUGCACUUGUCUCGGUCUGA&UAGGUGGCCCCCGUCCGAGGAGGAUCGUUUUCUAAGUGCAAUA mir-25ENSMUSG00000020331 2462 nt UTR 1 hits 321 -----1----1 >ENSMUSG00000020331 hs-mir-25 321 328 CAUUGCACUUGUCUCGGUCUGA&AUGUGCGGUGGCCUCCGAGGAAGAAUAUGGAUCAAGUGCAAUA mir-25 ENSRNOG00000008831 2009 nt UTR 1 hits 323 ._____1___1____1_____ >ENSRNOG00000008831 hs-mir-25 323 330 CAUUGCACUUGUCUCGGUCUGA&AUGUGCGGUGGCCUCCGAGGAAGAAUAUGGAUCAAGUGCAAUA mir-25 SINFRUG00000153577 2000 nt UTR 1 hits 1401

miRNA: mir-25

>SINFRUG00000153577 hs-mir-25 1401 1408 CAUUGCACUUGUCUCGGUCUGA&GGAUCCCUGGCUGAGGUGGAGGUGCAUGUGAGCGAGUGCAAUU miRNA: mir-25 Human predicted target: ENSG00000131459 Mouse predicted target: ENSMUSG00000020363 Rat predicted target: ENSRNOG00000002810 Fugu predicted target: SINFRUG00000147825 Hs Gene description: GLUCOSAMINE--FRUCTOSE-6-PHOSPHATE AMINOTRANSFERASE [ISOMERIZING] 2 (EC 2.6.1.16) (HEXOSEPHOSPHATE AMINOTRANSFERASE 2) (D-FRUCTOSE-6- PHOSPHATE AMIDOTRANSFERASE 2) (GFAT 2) (GFAT2). [Source:SWISSPROT; Acc: 094808] NM 005110 mir-25ENSG00000131459 2874 nt UTR 1 hits 256 >ENSG00000131459 hs-mir-25 256 263 CAUUGCACUUGUCUCGGUCUGA&UACACAUGGGGAUCAGAGCAGACUUCUCCACUACUGUGCAAUA mir-25 ENSMUSG00000020363 2848 nt UTR 1 hits 250 -----1----1 >ENSMUSG00000020363 hs-mir-25 250 257

CAUUGCACUUGUCUCGGUCUGA&UUACACAUGGGGAUCAGAGCAGACUUUCCACUACUGUGCAAUA

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mir-25 ENSRNOG00000002810 2000 nt UTR 1 hits 255
-----1----1-----
>ENSRNOG00000002810 hs-mir-25 255
                    262
CAUUGCACUUGUCUCGGUCUGA&UUACACACGGGGAUGGGAGCAGACUUUCCACUACUGUGCAAUA
mir-25 SINFRUG00000147825 2000 nt UTR 2 hits 1114 1407
.-----1-----1----1
>SINFRUG00000147825 hs-mir-25 1114 1121
CAUUGCACUUGUCUCGGUCUGA&AAGGGAGAGAAUCCUCCAAGAUUUGCAAUGAAGUAGUGCAAUU
>SINFRUG00000147825 hs-mir-25 1407 1414
CAUUGCACUUGUCUCGGUCUGA&UGGCAGAAAGGUAAUGAACUAAAGUAUUUAUAGUCGUGCAAUA
```

miRNA: mir-25

Human predicted target: ENSG00000146083

Mouse predicted target: ENSMUSG00000034928

Rat predicted target: ENSRNOG00000017641

Fugu predicted target: SINFRUG00000154157

Hs Gene description: NM 014901

mir-25 ENSG00000146083 4316 nt UTR 1 hits 2241

```
-----1----1
>ENSG00000146083 hs-mir-25 2241 2248
CAUUGCACUUGUCUCGGUCUGA&UAAAAUGAAAGUUGCUAGUUCUGCUUGACCAAGUAGUGCAAUC
mir-25
     ENSMUSG00000034928 4342 nt UTR 2 hits 2269 3585
  -----1-----1
>ENSMUSG00000034928 hs-mir-25 2269 2276
CAUUGCACUUGUCUCGGUCUGA&UAAAAUGAAAGUUGCUAGUUCUGCUUGACCAAGUAGUGCAAUC
>ENSMUSG00000034928 hs-mir-25 3585 3592
CAUUGCACUUGUCUCGGUCUGA&UAAAAUGAAAGUUGCUAGUUCUGCUUGACCAAGUAGUGCAAUC
ENSRNOG00000017641 4296 nt UTR 2 hits 2222 4158
mir-25
______1___1_____1_____
-----1-----
>ENSRNOG00000017641 hs-mir-25 2222 2229
CAUUGCACUUGUCUCGGUCUGA&UAAAAUGAAAGUUGCUAGUUCUGCUUGACCAAGUAGUGCAAUC
>ENSRNOG00000017641 hs-mir-25 4158 4165
CAUUGCACUUGUCUCGGUCUGA&UAAAAUGAAAGUUGCUAGUUCUGCUUGACCAAGUAGUGCAAUC
mir-25 SINFRUG00000154157 2000 nt UTR 1 hits 340
```

```
>SINFRUG00000154157 hs-mir-25
                    340
                         347
miRNA: mir-25
Human predicted target: ENSG00000155744
Mouse predicted target: ENSMUSG00000038174
Rat predicted target: ENSRNOG00000011327
Rat predicted target: ENSRNOG00000012078
Fugu predicted target: SINFRUG00000137040
Hs Gene description: NM 173822
                            2 hits 275 506
mir-25
      ENSG00000155744
                  4800 nt UTR
 -----1----1----1-----1
>ENSG00000155744 hs-mir-25
                  275
                       282
.(((((((...((...((&......)).)).))..))))..)))))...)))))...)
>ENSG00000155744 hs-mir-25
                  506
                       513
CAUUGCACUUGUCUCGGUCUGA&GAGAUUCUGCUAUGACUUUGGACUUCUCUGAGUCUGUGCAAUC
mir-25
      ENSMUSG00000038174 2575 nt UTR 2 hits 256 485
```

```
>ENSMUSG00000038174 hs-mir-25 256 263
>ENSMUSG00000038174 hs-mir-25 485
                   492
CAUUGCACUUGUCUCGGUCUGA&GAGAUUCUGCUAUGACUUUGGGCUUCUCUGAGCCUGUGCAAUU
mir-25
    ENSRNOG0000011327 2572 nt UTR 2 hits 257 489
 -----1----1----1
>ENSRNOG00000011327 hs-mir-25 257
                   264
CAUUGCACUUGUCUCGGUCUGA&UUUGCCUUUCCCUGCCUUCCUUUCUCUUGGGUGAUGUGCAAUC
>ENSRNOG00000011327 hs-mir-25 489
                   496
CAUUGCACUUGUCUCGGUCUGA&AGAUUCUGCUAUGACUUUGGGCUUUCUCUGAGUCUGUGCAAUU
mir-25
    ENSRNOG00000012078 2572 nt UTR 2 hits 257 489
 >ENSRNOG0000012078 hs-mir-25 257
                   264
CAUUGCACUUGUCUCGGUCUGA&UUUGCCUUUCCCUGCCUUCCUUUCUCUUGGGUGAUGUGCAAUC
>ENSRNOG00000012078 hs-mir-25 489 496
CAUUGCACUUGUCUCGGUCUGA&AGAUUCUGCUAUGACUUUGGGCUUUCUCUGAGUCUGUGCAAUU
```

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mir-25 SINFRUG00000137040 2000 nt UTR 2 hits 531 1416
-----1----1-----1
>SINFRUG00000137040 hs-mir-25 531 538
CAUUGCACUUGUCUCGGUCUGA&GCGUUUCAUUCCUACCCUUUCAUUCCCGGGCACAUGUGCAAUC
>SINFRUG00000137040 hs-mir-25 1416 1423
CAUUGCACUUGUCUCGGUCUGA&AUGACCUGCUAAUCUCUCAUGUGAUGAUUUUUGAAAGUGCAAUU
miRNA: mir-25
Human predicted target: ENSG00000156052
Mouse predicted target: ENSMUSG00000024639
Rat predicted target: ENSRNOG00000014183
Fugu predicted target: SINFRUG00000134002
Hs Gene description: GUANINE NUCLEOTIDE-BINDING PROTEIN G(Q), ALPHA
SUBUNIT. [Source:SWISSPROT; Acc: P50148] NM 002072
mir-25 ENSG00000156052 2401 nt UTR 2 hits 1556 1940
  ------1-----1
---1-----
>ENSG00000156052 hs-mir-25 1556 1563
CAUUGCACUUGUCUCGGUCUGA&UGAACCUACCAGGAGAAAUGUUUGGAAUUCUAUAUGUGCAAUU
>ENSG00000156052 hs-mir-25 1940 1947
```

```
CAUUGCACUUGUCUCGGUCUGA&CCUGUAAUUUAACAAACAGACUGCCUGUAGGUAUAGUGCAAUU
mir-25
     ENSMUSG00000024639 2342 nt UTR 2 hits 1605 1940
>ENSMUSG00000024639 hs-mir-25 1605 1612
CAUUGCACUUGUCUCGGUCUGA&CGAUCAUACUAGGAGGGAUGUUUGGAAUUCUCCAUGUGCAAUU
>ENSMUSG00000024639 hs-mir-25 1940 1947
CAUUGCACUUGUCUCGGUCUGA&CCUGUAAUUUAAUUAACAGACUGCCUGUAGGUAUAGUGCAAUU
mir-25
     ENSRNOG0000014183 2317 nt UTR 2 hits 1570 1906
   .______1____1____1
>ENSRNOG00000014183 hs-mir-25 1570 1577
CAUUGCACUUGUCUCGGUCUGA&CGAUCAUACUAGGAGAUGUUUGGAAUUCUCCAUGUGCAAUU
>ENSRNOG00000014183 hs-mir-25 1906 1913
CAUUGCACUUGUCUCGGUCUGA&CCUGUAAUUUAAUUAACAGACUGCCUGUAGGUACAGUGCAAUU
mir-25
     SINFRUG00000134002 2000 nt UTR 1 hits 1199
  -----1-----1
>SINFRUG00000134002 hs-mir-25 1199 1206
CAUUGCACUUGUCUCGGUCUGA&AACGUAAGCCUGUAAUUUCCAUUUAUUGAGGCAUAGUGCAAUU
```

miRNA: mir-25 Human predicted target: ENSG00000157152 Mouse predicted target: ENSMUSG0000009394 Rat predicted target: ENSRNOG00000008157 Fugu predicted target: SINFRUG00000126214 Hs Gene description: SYNAPSIN II. [Source:SWISSPROT; Acc: Q92777] mir-25 ENSG00000157152 2574 nt UTR 2 hits 798 2261 -------1----->ENSG00000157152 hs-mir-25 798 805 CAUUGCACUUGUCUCGGUCUGA&UAACUAUGAGAUUUUUUAAAAAAUGGGGCCGCUGAUGUGCAAUA >ENSG00000157152 hs-mir-25 2261 2268 CAUUGCACUUGUCUCGGUCUGA&AGUACCUCUUUUUGUGACUCUUGUACAGCUUAAUGUGCAAUA mir-25 ENSMUSG00000009394 2752 nt UTR 2 hits 780 2208 -----1----1 .______1____1 780 >ENSMUSG00000009394 hs-mir-25 787 >ENSMUSG00000009394 hs-mir-25 2208 2215

CAUUGCACUUGUCUCGGUCUGA&CAUCUCCCUUUUGUGAUUCUCUUGUACAGCUCAAUGUGCAAUA

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mir-25 ENSRNOG00000008157 2750 nt UTR 2 hits 767 2144
-----1-----
>ENSRNOG00000008157 hs-mir-25 767 774
>ENSRNOG00000008157 hs-mir-25 2144 2151
CAUUGCACUUGUCUCGGUCUGA&CAUCUCCCUUUUGUGAUUCUCUUGUACAGCUCAAUGUGCAAUA
SINFRUG00000126214 2000 nt UTR 1 hits 1359
mir-25
._____1___1____
>SINFRUG00000126214 hs-mir-25 1359 1366
CAUUGCACUUGUCUCGGUCUGA&GCAUGGUGUCUGUGCGUCUUGUGAGCCGAUGCAAAGUGCAAUA
```

miRNA: mir-25

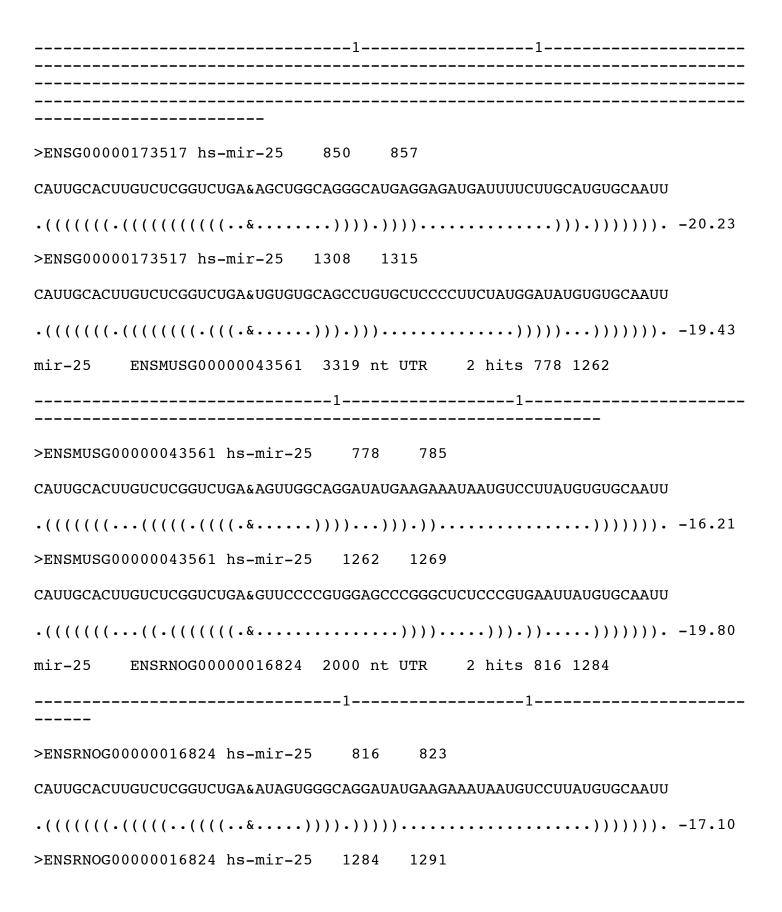
Human predicted target: ENSG00000173517

Mouse predicted target: ENSMUSG00000043561

Rat predicted target: ENSRNOG00000016824

Fugu predicted target: SINFRUG00000154075

mir-25 ENSG00000173517 7992 nt UTR 2 hits 850 1308



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CAUUGCACUUGUCUCGGUCUGA&GUUCCCCAUGAAGCCUGUGCUCUCCCGUGAAUUAUGUGCAAUU
.(((((((...((...((&.....)))..))).))....))))))....)))))....)
mir-25
       SINFRUG00000154075 2000 nt UTR 1 hits 956
>SINFRUG00000154075 hs-mir-25 956
                             963
CAUUGCACUUGUCUCGGUCUGA&CAGCCCUGACCAGGCUUGACUUCUUGUUGGAGCAUGUGCAAUU
miRNA: mir-26a
Human predicted target: ENSG00000110321
Mouse predicted target: ENSMUSG0000005610
Rat predicted target: ENSRNOG00000011124
Rat predicted target: ENSRNOG0000017168
Fugu predicted target: SINFRUG00000136922
Hs Gene description: EUKARYOTIC TRANSLATION INITIATION FACTOR 4 GAMMA, 2;
EUKARYOTIC TRANSLATION INITIATION FACTOR 4G-LIKE 1; P97.
[Source:RefSeq;Acc:NM 001418] NM 001418
mir-26a ENSG00000110321 2000 nt UTR 2 hits 378 756
 -----1----1
>ENSG00000110321 hs-mir-26a 378 385
UUCAAGUAAUCCAGGAUAGGCU&CACUGAAUACUGUAGAAAUGCACUUUGCUCAGUAAUACUUGAGU
>ENSG00000110321 hs-mir-26a 756 763
```

```
UUCAAGUAAUCCAGGAUAGGCU&UUUUAUAUACUUGUAUCUAUCAAUAAACAUUGUGAUACUUGAU
mir-26a
     ENSMUSG0000005610 2762 nt UTR 2 hits 380 757
 >ENSMUSG00000005610 hs-mir-26a 380 387
UUCAAGUAAUCCAGGAUAGGCU&CACUGAAUACUGUAGAGAUGCACUUUGCUCAGUAAUACUUGAGU
>ENSMUSG00000005610 hs-mir-26a 757 764
UUCAAGUAAUCCAGGAUAGGCU&UUUUAUAUACUUGUAUCUAUCAAUAAACAUUGUGAUACUUGAU
mir-26a
     ENSRNOG00000011124 2000 nt UTR 2 hits 379 756
  -----1----1-----1
>ENSRNOG00000011124 hs-mir-26a 379
                     386
UUCAAGUAAUCCAGGAUAGGCU&CACUGAAUACUGUAGAGAUGCACUUUGCUCAGUAAUACUUGAGU
>ENSRNOG00000011124 hs-mir-26a 756 763
UUCAAGUAAUCCAGGAUAGGCU&UUUUAUAUACUUGUAUCUAUCAAUAAACAUUGUGAUACUUGAAA
mir-26a
     ENSRNOG00000017168 2762 nt UTR 2 hits 379 756
   >ENSRNOG00000017168 hs-mir-26a 379
                     386
UUCAAGUAAUCCAGGAUAGGCU&CACUGAAUACUGUAGAGAUGCACUUUGCUCAGUAAUACUUGAGU
```

>ENSRNOG00000017168 hs-mir-26a 756 763 UUCAAGUAAUCCAGGAUAGGCU&UUUUAUAUACUUGUAUCUAUCAAUAAACAUUGUGAUACUUGAU mir-26a SINFRUG00000136922 2000 nt UTR 1 hits 682 >SINFRUG00000136922 hs-mir-26a 682 689 UUCAAGUAAUCCAGGAUAGGCU&UUCAUAUGAAUAUACCUCUAAUGUAUCUCGGACUGUACUUGAAU miRNA: mir-26a Human predicted target: ENSG00000137193 Mouse predicted target: ENSMUSG00000024014 Rat predicted target: ENSRNOG0000000529 Fugu predicted target: SINFRUG00000138008 Hs Gene description: PROTO-ONCOGENE SERINE/THREONINE-PROTEIN KINASE PIM-1 (EC 2.7.1.37). [Source:SWISSPROT; Acc:P11309] NM 002648 ENSG00000137193 3337 nt UTR 1 hits 478 mir-26a >ENSG00000137193 hs-mir-26a 478 485 UUCAAGUAAUCCAGGAUAGGCU&GCCUUCUGUGGGGGACUCCGGCUGUGCUGGGAGAAAUACUUGAAC ENSMUSG00000024014 2000 nt UTR 1 hits 450 mir-26a

```
-----1----1-----1
>ENSMUSG00000024014 hs-mir-26a 450 457
UUCAAGUAAUCCAGGAUAGGCU&GCCUUCUGUGGGGGACUCCGCCUGUGCUGGGAGAAAUACUUGAAC
mir-26a ENSRNOG0000000529 2360 nt UTR 1 hits 434
>ENSRNOG0000000529 hs-mir-26a 434 441
UUCAAGUAAUCCAGGAUAGGCU&CCUUCUGUGGGGACUCUUGUCUGUGCUGGGAGAAAUACUUGAAC
mir-26a
    SINFRUG00000138008 2000 nt UTR 1 hits 397
>SINFRUG00000138008 hs-mir-26a 397
                   404
UUCAAGUAAUCCAGGAUAGGCU&GAGUGCCUUCUGCAAAUGUGUGAAGAGUCUGACCGUACUUGAAG
```

miRNA: mir-26a

Human predicted target: ENSG00000163932

Mouse predicted target: ENSMUSG00000021948

Rat predicted target: ENSRNOG00000016346

Fugu predicted target: SINFRUG00000127498

Hs Gene description: PROTEIN KINASE C, DELTA TYPE (EC 2.7.1.-) (NPKC-DELTA). [Source:SWISSPROT; Acc: Q05655] NM 006254

	ENSG00000163932 2263 nt UTR 1 hits 226
	·1 ·
>ENSG0000	00163932 hs-mir-26a 226 233
UUCAAGUAA	AUCCAGGAUAGGCU&GCCUUCGGAGGGAAAUUGUAAAUCCUGUGUUUCAUUACUUGAAU
((((((((((((((((((((((((((((((((((((((((((((((
mir-26a	ENSMUSG00000021948 2498 nt UTR 1 hits 232
	-1
>ENSMUSG(00000021948 hs-mir-26a 232 239
UUCAAGUAA	AUCCAGGAUAGGCU&GCCAUCAGAGGGAAACUGUAAAUCCUGUGUUUCAUUACUUGAAU
((((((([((((((((((.&)))))))))))))))))
mir-26a	ENSRNOG0000016346 2473 nt UTR 1 hits 234
	-1
	·
>ENSRNOG(00000016346 hs-mir-26a 234 241
UUCAAGUAA	AUCCAGGAUAGGCU&GCCAUCGGAGGGAAACUGUAAAUCCUGUGUGUCAUUACUUGAAU
((((((((((((((((())))))))))))))))))))))))))
mir-26a	SINFRUG00000127498 2000 nt UTR 1 hits 593
	11
>SINFRUGO	00000127498 hs-mir-26a 593 600
UUCAAGUAA	AUCCAGGAUAGGCU&AAACACAGUAAAAGUAAGUGCUUAUUCGUCAUAUUACUUGAAU
(((((((((((((((()))))))))))))))23.60

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Human predicted target: ENSG00000170365
Mouse predicted target: ENSMUSG00000031681
Rat predicted target: ENSRNOG00000018483
Fugu predicted target: SINFRUG00000126514
Hs Gene description: MOTHERS AGAINST DECAPENTAPLEGIC HOMOLOG 1 (SMAD 1)
(MOTHERS AGAINST DPP HOMOLOG 1) (MAD-RELATED PROTEIN 1) (TRANSFORMING
GROWTH FACTOR- BETA SIGNALING PROTEIN-1) (BSP-1) (HSMAD1) (JV4-1).
[Source:SWISSPROT; Acc:Q15797] NM 005900
mir-26a
       ENSG00000170365 2160 nt UTR 2 hits 46 103
>ENSG00000170365 hs-mir-26a 46
                             53
UUCAAGUAAUCCAGGAUAGGCU&GCAUCUGCCUCUGGAAAACUAUUGAGCCUUGCAUGUACUUGAAG
>ENSG00000170365 hs-mir-26a
                       103 110
UUCAAGUAAUCCAGGAUAGGCU&GACACGAUUGAGAACUGACAAAGGAGCCUUGAUAAUACUUGAC
mir-26a ENSMUSG00000031681 3248 nt UTR 2 hits 46 103
_____
>ENSMUSG00000031681 hs-mir-26a 46 53
UUCAAGUAAUCCAGGAUAGGCU&GCUUCCGUCUCUUGCAAACUAUCGAGCCUUGCAUGUACUUGAAG
>ENSMUSG00000031681 hs-mir-26a 103 110
UUCAAGUAAUCCAGGAUAGGCU&GACAGGAUGGAGACCUGACGAAGGAGCCACGAUAAUACUUGAC
.((((((....(...(((&........))))).)....)))))). -15.60
```

miRNA: mir-26a

```
mir-26a ENSRNOG00000018483 2285 nt UTR 2 hits 49 102
>ENSRNOG00000018483 hs-mir-26a 49
                          56
UUCAAGUAAUCCAGGAUAGGCU&GCUUCUGUCUCUUGCAAACUAUUGGGCCUUGCAUGUACUUGAAG
>ENSRNOG00000018483 hs-mir-26a 102
                         109
UUCAAGUAAUCCAGGAUAGGCU&GUCAGACAGGAUGGGGAGCUGUAAAGGAGCCGUGAUACUUGAC
mir-26a
      SINFRUG00000126514 2000 nt UTR 2 hits 194 273
>SINFRUG00000126514 hs-mir-26a 194
                         201
UUCAAGUAAUCCAGGAUAGGCU&GGGACCAGUGGGGCUGGGCAGGAUGGUUUGAUGUCUACUUGAAG
>SINFRUG00000126514 hs-mir-26a 273
                         280
UUCAAGUAAUCCAGGAUAGGCU&GGAGUCAAAGAAGUGAGCAUGAUGCAACUGGAAGAUACUUGAU
```

miRNA: mir-27a

Human predicted target: ENSG00000055070

Mouse predicted target: ENSMUSG00000040842

Rat predicted target: ENSRNOG00000009183

Fugu predicted target: SINFRUG00000123544

```
Fugu predicted target: SINFRUG00000124328
Hs Gene description: NM 015609
      ENSG00000055070
                  5002 nt UTR 4 hits 122 146 168 198
mir-27a
>ENSG00000055070 hs-mir-27a 122
                       129
UUCACAGUGGCUAAGUUCCGCC&GGACUUGAGCAGAGGGAACGACCUGACUUACUUGCACUGUGAU
>ENSG00000055070 hs-mir-27a
                   146
                       153
UUCACAGUGGCUAAGUUCCGCC&GACUUACUUGCACUGUGAUCCCCCUUGCUCCGCCCACUGUGAC
>ENSG00000055070 hs-mir-27a 168
                       175
UUCACAGUGGCUAAGUUCCGCC&CCUUGCUCCGCCCACUGUGACCUUGAACCCCAUGCACUGUGAC
>ENSG00000055070 hs-mir-27a 198 205
UUCACAGUGGCUAAGUUCCGCC&CAUGCACUGUGACCUCCCCCUUCCCCCUUCCCACUGUGAU
mir-27a ENSMUSG00000040842 2000 nt UTR 4 hits 119 143 165 193
----1111------
>ENSMUSG00000040842 hs-mir-27a 119 126
UUCACAGUGGCUAAGUUCCGCC&GGACUUGAGCAGAGGGAAUAACCUGACUUACUUGCACUGUGAU
>ENSMUSG00000040842 hs-mir-27a 143 150
```

```
UUCACAGUGGCUAAGUUCCGCC&GACUUACUUGCACUGUGAUCCCCCUUGCUCGCCCACUGUGAC
>ENSMUSG00000040842 hs-mir-27a 165 172
UUCACAGUGGCUAAGUUCCGCC&CCUUGCUCCGCCCACUGUGACCUUGAACCCCAUGCACUGUGAC
>ENSMUSG00000040842 hs-mir-27a 193 200
UUCACAGUGGCUAAGUUCCGCC&CCCAUGCACUGUGACCUCUGCCUCCCCCCUUCCCACUGUGAU
mir-27a
    ENSRNOG00000009183 2530 nt UTR 8 hits 117 141 163 191 641
665 687 715
>ENSRNOG00000009183 hs-mir-27a 117 124
UUCACAGUGGCUAAGUUCCGCC&GGACUUGAGCAGAGGGAAUAACCUGACUUACUUGCACUGUGAU
>ENSRNOG00000009183 hs-mir-27a 141
                       148
UUCACAGUGGCUAAGUUCCGCC&GACUUACUUGCACUGUGAUCCCCCUUGCUCCGCCCACUGUGAC
>ENSRNOG00000009183 hs-mir-27a 163
                       170
UUCACAGUGGCUAAGUUCCGCC&CCUUGCUCCGCCCACUGUGACCUUGAACCCCAUGCACUGUGAC
>ENSRNOG00000009183 hs-mir-27a 191 198
UUCACAGUGGCUAAGUUCCGCC&CCCAUGCACUGUGACCUCUGCCUCCCCCCUUCCCACUGUGAU
>ENSRNOG00000009183 hs-mir-27a 641 648
```

```
UUCACAGUGGCUAAGUUCCGCC&GGACUUGAGCAGAGGGAAUAACCUGACUUACUUGCACUGUGAU
>ENSRNOG00000009183 hs-mir-27a 665 672
UUCACAGUGGCUAAGUUCCGCC&GACUUACUUGCACUGUGAUCCCCCUUGCUCGCCCACUGUGAC
>ENSRNOG00000009183 hs-mir-27a 687 694
UUCACAGUGGCUAAGUUCCGCC&CCUUGCUCCGCCCACUGUGACCUUGAACCCCAUGCACUGUGAC
>ENSRNOG00000009183 hs-mir-27a 715 722
UUCACAGUGGCUAAGUUCCGCC&CCCAUGCACUGUGACCUCUGCCUCCCCCCUUCCCACUGUGAU
mir-27a SINFRUG00000123544 2000 nt UTR 2 hits 879 907
   >SINFRUG00000123544 hs-mir-27a 879 886
UUCACAGUGGCUAAGUUCCGCC&GCGCUCUUCUCUUAUACCACCCCGAGUCGGUUGACACUGUGAU
.((((((((.....))))))))))...))))))...)
>SINFRUG00000123544 hs-mir-27a 907 914
UUCACAGUGGCUAAGUUCCGCC&GGUUGACACUGUGAUCGUGGACGUCUUCUGCUCUCACUGUGAC
SINFRUG00000124328 2000 nt UTR 1 hits 314
mir-27a
>SINFRUG00000124328 hs-mir-27a 314 321
```

UUCACAGUGGCUAAGUUCCGCC&CGCUGCGAACGGGCCUUCAGCUCACAUCCCUCUACACUGUGAU

```
miRNA: mir-27a
Human predicted target: ENSG00000135373
Mouse predicted target: ENSMUSG0000012350
Rat predicted target: ENSRNOG0000007484
Fugu predicted target: SINFRUG00000151958
Hs Gene description: ETS HOMOLOGOUS FACTOR ISOFORM B; EPITHELIUM-SPECIFIC
ETS FACTOR 3. [Source:RefSeq; Acc: NM 012153] NM 172233
mir-27a
      ENSG00000135373
                   3861 nt UTR 2 hits 3387 3499
>ENSG00000135373 hs-mir-27a 3387
                        3394
UUCACAGUGGCUAAGUUCCGCC&ACCUUCAAGGACAUAUUAUCUACUAUGAACAUUUUACUGUGAGA
>ENSG00000135373 hs-mir-27a 3499
                        3506
UUCACAGUGGCUAAGUUCCGCC&AUAUGUUGGAUGAGGAUUCUGUUGCCUUAUUGGGAACUGUGAGA
mir-27a
      ENSMUSG00000012350 5426 nt UTR 2 hits 2373 2481
>ENSMUSG00000012350 hs-mir-27a 2373
                          2380
UUCACAGUGGCUAAGUUCCGCC&CAUAAUAACUAAACCUUCCAGGAUGAGAACAUUUUACUGUGAC
```

```
>ENSMUSG00000012350 hs-mir-27a 2481
                        2488
UUCACAGUGGCUAAGUUCCGCC&GUGUCUGCUGGAUGAGAAUUCUGUUGCUUUUUUAGAACUGUGAGA
mir-27a
      ENSRNOG0000007484 5075 nt UTR 4 hits 2164 2251 4810 4916
  -----1---1----
>ENSRNOG00000007484 hs-mir-27a
                    2164
                        2171
UUCACAGUGGCUAAGUUCCGCC&AGCAUAAUAACCAAACCUCCCAGGACGAACAUUUUACUGUGAC
.(((((((((...((&...........))..)))))...)))))))...)
>ENSRNOG00000007484 hs-mir-27a 2251 2258
UUCACAGUGGCUAAGUUCCGCC&UGUCUUGCUGGAUAAGAAUUCUGUUGCUUUCUAGAACUGUGAGA
>ENSRNOG00000007484 hs-mir-27a 4810
                        4817
UUCACAGUGGCUAAGUUCCGCC&ACCUCCCAGGACAUAUCCUCUCAGGCGAACAUUUUACUGUGAC
>ENSRNOG00000007484 hs-mir-27a 4916
                        4923
UUCACAGUGGCUAAGUUCCGCC&UGUCUUGCUGGAUAAGAAUUCUGUUGCUUUCUAGAACUGUGAGA
SINFRUG00000151958 2000 nt UTR 2 hits 69 378
mir-27a
>SINFRUG00000151958 hs-mir-27a 69 76
UUCACAGUGGCUAAGUUCCGCC&GUUGACGAUUUAGUAUGCGUUUGAUAUUUUUUUACCACUGUGAU
```

```
>SINFRUG00000151958 hs-mir-27a 378
                         385
UUCACAGUGGCUAAGUUCCGCC&AUGUAUUCAGUGUGUGUUGAGUGUGUGUUAUUUAUACUGUGAAA
miRNA: mir-29b
Human predicted target: ENSG0000071575
Mouse predicted target: ENSMUSG00000020601
Rat predicted target: ENSRNOG0000004110
Fugu predicted target: SINFRUG00000143157
Hs Gene description: GS3955 PROTEIN. [Source:RefSeq; Acc:NM 021643]
   NM 021643
mir-29b
     ENSG00000071575 2610 nt UTR 2 hits 1758 1862
 >ENSG00000071575 hs-mir-29b 1758
                       1765
22.90
>ENSG00000071575 hs-mir-29b 1862 1869
UAGCACCAUUUGAAAUCAGUGUU&GGUUGGUGACAUGCAUGGUGGGGAUCUAUGGCCUCUGGUGCUU
ENSMUSG00000020601 3879 nt UTR 3 hits 1701 1805 3766
mir-29b
--1----
```

>ENSMUSG00000020601 hs-mir-29b 1701 1708

```
UAGCACCAUUUGAAAUCAGUGUU&GAAGAUACAGAGAGAGGGUUUUUACAUUCAGAAGAUGGUGCUGU
21.60
>ENSMUSG00000020601 hs-mir-29b 1805
                       1812
UAGCACCAUUUGAAAUCAGUGUU&GAUUGGAAACAUGCAUGAUGGGGACUAAUGGCCUCUGGUGCUU
>ENSMUSG00000020601 hs-mir-29b 3766
                       3773
UAGCACCAUUUGAAAUCAGUGUU&GCAAGAGGAAACACAGAGCUCUUUUGACUUGGGAGUGGUGCUAG
24.10
mir-29b
    ENSRNOG00000004110 3884 nt UTR 2 hits 1702 1806
>ENSRNOG00000004110 hs-mir-29b 1702
                        1709
UAGCACCAUUUGAAAUCAGUGUU&GAAGAUACAGAGAAAGGGUUUUUACAUUCAGAAGAUGGUGCUGU
>ENSRNOG00000004110 hs-mir-29b 1806
                       1813
UAGCACCAUUUGAAAUCAGUGUU&GAUUGGUAACAUGCAUGAUGGGGACUAAUGGCCUCUGGUGCUU
mir-29b
     SINFRUG00000143157 2000 nt UTR 2 hits 302 1509
   -----1-----1-----1
>SINFRUG00000143157 hs-mir-29b 302
                        309
UAGCACCAUUUGAAAUCAGUGUU&AAUUUUUAUUUCUUUUGGAUCUGUUUGGUUUUAUGUGGUGCUC
```

```
UAGCACCAUUUGAAAUCAGUGUU&UGCUUUUUUUCCUUCCCCUGAUCAACUUUUUAAGUUGGUGCUGA
22.00
miRNA: mir-29b
Human predicted target: ENSG00000080573
Mouse predicted target: ENSMUSG00000004098
Rat predicted target: ENSRNOG00000020525
Fugu predicted target: SINFRUG00000127082
Fugu predicted target: SINFRUG00000146544
Hs Gene description: COLLAGEN ALPHA 3(V) CHAIN (FRAGMENTS).
[Source:SWISSPROT; Acc: P25940] NM 015719
mir-29b
      ENSG00000080573 2850 nt UTR 3 hits 52 385 663
>ENSG00000080573 hs-mir-29b
                        52
                             59
UAGCACCAUUUGAAAUCAGUGUU&AGGGACCAUGAGGGAGCCCCAGAAUGGGGUGCAUUUGGUGCUGA
21.00
>ENSG00000080573 hs-mir-29b
                       385
                             392
UAGCACCAUUUGAAAUCAGUGUU&CUCCUCACUCCUCCGUCGCUGCCCUUCACACCUUUUGGUGCUAC
((((((((...((((....))))))))...)))))...)))))...)))))
22.10
>ENSG00000080573 hs-mir-29b
                       663
                             670
```

1509

1516

>SINFRUG00000143157 hs-mir-29b

```
UAGCACCAUUUGAAAUCAGUGUU&GACCAAGAUGUUGGGGGGGGUGAAUCAGGAUCCUAAUGGUGCUGC
19.55
mir-29b ENSMUSG0000004098 2000 nt UTR 3 hits 57 334 586
>ENSMUSG00000004098 hs-mir-29b 57 64
UAGCACCAUUUGAAAUCAGUGUU&GGAAGGAAGCUGAAGGGAGCCCCACAUGGGCUCCUUGGUGCUGA
22.30
>ENSMUSG00000004098 hs-mir-29b
                 334
                      341
((((((((....))))))).....))))))))
>ENSMUSG00000004098 hs-mir-29b 586
                      593
UAGCACCAUUUGAAAUCAGUGUU&GGACCAAGAUGUUGGGCAUAAAUCAGGAUCCUACAUGGUGCUGC
19.40
mir-29b ENSRNOG00000020525 2786 nt UTR 3 hits 52 333 585
>ENSRNOG00000020525 hs-mir-29b 52
                      59
UAGCACCAUUUGAAAUCAGUGUU&GAAGGAAGCUAAAGGGAGCCCCAUGUGGGGCUAUGUGGUGCUGA
(((((((((.....))))))))).....))))).....)))))
20.40
>ENSRNOG00000020525 hs-mir-29b 333
                      340
```

```
((((((((....)))))))))) -
18.11
>ENSRNOG00000020525 hs-mir-29b
                 585
                     592
UAGCACCAUUUGAAAUCAGUGUU&GGACCAAGAUGUUGGGCACAAAUCAGGAUCCUAAAUGGUGCUGC
24.40
     SINFRUG00000127082 2000 nt UTR 1 hits 584
mir-29b
  >SINFRUG00000127082 hs-mir-29b
                 584
                     591
18.10
mir-29b
     SINFRUG00000146544 2000 nt UTR 2 hits 960 1097
   -----1----1----1----1----1-----
>SINFRUG00000146544 hs-mir-29b 960
                     967
UAGCACCAUUUGAAAUCAGUGUU&UUUGGGGUUUGUGUGACUGAUGAUUUGCUCUGCCAUGGUGCUAA
21.60
>SINFRUG00000146544 hs-mir-29b 1097 1104
UAGCACCAUUUGAAAUCAGUGUU&AUUGCUCUUUCAGCUGAAAUAACGUCCUUAGAGACUGGUGCUU
```

miRNA: mir-29b

Human predicted target: ENSG00000119772

```
Mouse predicted target: ENSMUSG00000020661
Rat predicted target: ENSRNOG00000012555
Fugu predicted target: SINFRUG00000135438
Hs Gene description: DNA (CYTOSINE-5)-METHYLTRANSFERASE 3A (EC 2.1.1.37)
(DNMT3A) (DNA METHYLTRANSFERASE HSAIIIA) (DNA MTASE HSAIIIA) (M.HSAIIIA).
[Source:SWISSPROT; Acc:Q9Y6K1] NM 175630
       ENSG00000119772 3303 nt UTR
                                4 hits 862 1305 2998 3256
mir-29b
  -----1---1----1
>ENSG00000119772 hs-mir-29b 862
                           869
UAGCACCAUUUGAAAUCAGUGUU&GGUACUGUUAACUACUGUACAACCCGACUUCAUAAUGGUGCUU
>ENSG00000119772 hs-mir-29b 1305 1312
UAGCACCAUUUGAAAUCAGUGUU&CACCUGGAGCAAAUAAAAAACAUACAAAACGUACUGGUGCUU
>ENSG00000119772 hs-mir-29b 2998 3005
UAGCACCAUUUGAAAUCAGUGUU&CCUCUGCCCCUCAGUGGAGUCCCUGUGCUAACUGUGGUGCUC
.((((((((.....)))))))))......))))))).....)
>ENSG00000119772 hs-mir-29b 3256
                          3263
UAGCACCAUUUGAAAUCAGUGUU&UUUCCCAGCGGCCCAAGCUCCACCGGAACUGGGCCUGGUGCUC
.(((((((...(...(((((...&..........))))))).).)))))). -18.80
mir-29b
       ENSMUSG00000020661 3103 nt UTR 2 hits 825 1252
 >ENSMUSG00000020661 hs-mir-29b
                       825
                             832
```

UAGCACCAUUUGAAAUCAGUGUU&GGUACUGUUAACUACUGUACAUCCCGACUUCAUAAUGGUGCUU

```
>ENSMUSG00000020661 hs-mir-29b 1252 1259
UAGCACCAUUUGAAAUCAGUGUU&CACCUGGAGCAAAUAAAAAACAUACAAAAUGUACUGGUGCUU
ENSRNOG00000012555 2000 nt UTR 2 hits 811 1281
-----1----1
>ENSRNOG00000012555 hs-mir-29b 811
UAGCACCAUUUGAAAUCAGUGUU&GGUACUGUUAACUACUGUACAUCCCAACUUCAUAAUGGUGCUU
>ENSRNOG00000012555 hs-mir-29b 1281 1288
UAGCACCAUUUGAAAUCAGUGUU&CACCUGGAGCAAAUAAAAAACAUACAAAACGUACUGGUGCUU
mir-29b
    SINFRUG00000135438 2000 nt UTR 2 hits 459 647
 -------1----1----1
>SINFRUG00000135438 hs-mir-29b 459 466
UAGCACCAUUUGAAAUCAGUGUU&AAUAAAGGUACUACUGUAAUAUGGUUACAACACCAUGGUGCUC
>SINFRUG00000135438 hs-mir-29b 647 654
UAGCACCAUUUGAAAUCAGUGUU&UUUUAUGCAUUUUACAGCUUUUCUACAGUUUGUACUGGUGCUC
```

miRNA: mir-29b

```
Human predicted target: ENSG00000132510
Mouse predicted target: ENSMUSG0000018476
Mouse predicted target: ENSMUSG00000046383
Rat predicted target: ENSRNOG00000010142
Fugu predicted target: SINFRUG00000131193
Fugu predicted target: SINFRUG00000148279
      ENSG00000132510 3275 nt UTR 3 hits 744 1690 1696
mir-29b
  -----
>ENSG00000132510 hs-mir-29b
                    744
                         751
UAGCACCAUUUGAAAUCAGUGUU&CCACCCGUCCGCCCGGGCUCCAGCCGGGUUCUCAUGGUGCUC
>ENSG00000132510 hs-mir-29b 1690
                        1697
UAGCACCAUUUGAAAUCAGUGUU&GAAUCUGCUGGUGGCUGCCUUCAAUCUUCUCCUGCUGGUGCUGG
21.90
>ENSG00000132510 hs-mir-29b 1696
                        1703
UAGCACCAUUUGAAAUCAGUGUU&GCUGGUGGCUGCCUUCAAUCUUCUCCUGCUGGUGCUGGUGCUAG
22,20
mir-29b
      ENSMUSG00000018476 2147 nt UTR
                              2 hits 782 1743
           -----1-----1-----1-----
>ENSMUSG0000018476 hs-mir-29b 782
                           789
UAGCACCAUUUGAAAUCAGUGUU&GUCUCCGCCCGCCCGCGCCCGGCCCCGGCCCCGGCCUCCAUGGUGCUC
```

```
>ENSMUSG00000018476 hs-mir-29b 1743 1750
UAGCACCAUUUGAAAUCAGUGUU&GCUGGUGGCUGUUUUCAAUCUCCUCUUGCUGGCACUGGUGCUGG
mir-29b ENSMUSG00000046383 2002 nt UTR 1 hits 1921
>ENSMUSG00000046383 hs-mir-29b 1921
                        1928
UAGCACCAUUUGAAAUCAGUGUU&UGCGCGCCGUCGCAGCGCGGGCCUACAGGGCGUGGUGGUGCUAG
20.59
mir-29b ENSRNOG00000010142 2000 nt UTR 2 hits 776 1729
 >ENSRNOG00000010142 hs-mir-29b 776
                        783
UAGCACCAUUUGAAAUCAGUGUU&GUCUCCGCCCGCCCGGGCUCCAGCCGGGUUCUCAUGGUGCUC
>ENSRNOG00000010142 hs-mir-29b 1729 1736
UAGCACCAUUUGAAAUCAGUGUU&GCUGGUGGCUGUUUUCAAUCUCCUCUUGUUGGCGCUGGUGCUGG
23.17
mir-29b SINFRUG00000131193 2000 nt UTR 1 hits 39
>SINFRUG00000131193 hs-mir-29b 39 46
UAGCACCAUUUGAAAUCAGUGUU&CUCACUCAGCGUUUCAUCAUAUUUUUGUGCUAAAAAUGGUGCUU
```

```
mir-29b SINFRUG00000148279 2000 nt UTR 2 hits 279 1105
-----1----1
>SINFRUG00000148279 hs-mir-29b 279 286
UAGCACCAUUUGAAAUCAGUGUU&CCAGGCGGCCACCAACACACAGUUUACUCUCAGAUGGUGCUU
>SINFRUG00000148279 hs-mir-29b 1105 1112
UAGCACCAUUUGAAAUCAGUGUU&GAUUUUAUAAGAUGCGUUGAACAUAACAGGAUAGAUGGUGCUAA
22.62
miRNA: mir-29b
Human predicted target: ENSG00000138779
Mouse predicted target: ENSMUSG00000040943
Rat predicted target: ENSRNOG00000012350
Fugu predicted target: SINFRUG00000143809
mir-29b
      ENSG00000138779 5282 nt UTR 3 hits 447 596 1151
 -----
>ENSG00000138779 hs-mir-29b 447 454
UAGCACCAUUUGAAAUCAGUGUU&UAGUAUUACAGUGACAGGAAUCUUAAAAUACCAUCUGGUGCUGA
19.25
>ENSG00000138779 hs-mir-29b 596
                       603
UAGCACCAUUUGAAAUCAGUGUU&GGAAAACACUGAAUUUGUUUGGAUGUUCUAAGAAAUGGUGCUAA
```

```
27.59
>ENSG00000138779 hs-mir-29b
                1151
                    1158
UAGCACCAUUUGAAAUCAGUGUU&UCAAGGGAAUACGUUAGUCCACAAAACAUGUUUUCUGGUGCUC
ENSMUSG00000040943 2877 nt UTR 4 hits 398 557 1055 1161
  >ENSMUSG00000040943 hs-mir-29b 398
UAGCACCAUUUGAAAUCAGUGUU&ACACAGCGCUGUAGUAGAGCAGUUGCAGGAUCAUCUGGUGCUGA
24,25
>ENSMUSG00000040943 hs-mir-29b
                  557
                      564
UAGCACCAUUUGAAAUCAGUGUU&CAAAACACUGAAUCUGUUUGGGUGUUAACAUUAAAUGGUGCUAC
27.80
>ENSMUSG00000040943 hs-mir-29b 1055
                     1062
UAGCACCAUUUGAAAUCAGUGUU&GAUAUGCUAGUCCACAGAAAACAAAUAACAGUUUUUGGUGCUC
>ENSMUSG00000040943 hs-mir-29b 1161 1168
UAGCACCAUUUGAAAUCAGUGUU&AAGAACGUCUGUUAAUUGCAGGUGAUAAUUAGCCUUGGUGCUGC
18.21
mir-29b
     ENSRNOG0000012350 2000 nt UTR 2 hits 556 1107
>ENSRNOG00000012350 hs-mir-29b 556
```

563

UAGCACCAUUUGAAAUCAGUGUU&CAAAACACUGAAUUUGUUUGGGUGUUAACAUUAAAUGGUGCUAC 27.80 >ENSRNOG00000012350 hs-mir-29b 1114 1107 UAGCACCAUUUGAAAUCAGUGUU&GUGAAUGGAUAGGCUAGUCUACAAAACACGUUUCCUGGUGCUU SINFRUG00000143809 2000 nt UTR 3 hits 241 665 875 mir-29b -----1----1----->SINFRUG00000143809 hs-mir-29b 241 248 UAGCACCAUUUGAAAUCAGUGUU&GGCAAAUUCUGCAACACACCCUUGUCAAAAUAUCUGGUGCUU >SINFRUG00000143809 hs-mir-29b 665 672 UAGCACCAUUUGAAAUCAGUGUU&CUGCUUUGUUUAUGCAAAAAUGAACUUUCUUGUGUUGGUGCUC >SINFRUG00000143809 hs-mir-29b 875 882 UAGCACCAUUUGAAAUCAGUGUU&CUGGACUGUGAAUAUUACAUGUGUUAUUAUGUCUGUGGUGCUU

miRNA: mir-29b

Human predicted target: ENSG00000171215

Mouse predicted target: ENSMUSG00000034832

Rat predicted target: ENSRNOG00000011387

Fugu predicted target: SINFRUG00000143809

```
mir-29b ENSG00000171215 2395 nt UTR 5 hits 53 1070 1084 1101 1471
>ENSG00000171215 hs-mir-29b 53
                     60
UAGCACCAUUUGAAAUCAGUGUU&UACCUCAGCGUCGGGCCUGGCCCGAGCUGUCUCUGUGGUGCUU
>ENSG00000171215 hs-mir-29b 1070
                    1077
UAGCACCAUUUGAAAUCAGUGUU&AAACAGGAAGUUGAACCCAAGCUGUGAAAAGCCAGUGGUGCUC
>ENSG00000171215 hs-mir-29b 1084 1091
UAGCACCAUUUGAAAUCAGUGUU&ACCCAAGCUGUGAAAAGCCAGUGGUGCUCUGUGCAUGGUGCUGU
22.40
>ENSG00000171215 hs-mir-29b 1101
                    1108
UAGCACCAUUUGAAAUCAGUGUU&CCAGUGGUGCUCUGUGCAUGGUGCUGUGCGGAGCCUGGUGCUGU
22.00
>ENSG00000171215 hs-mir-29b 1471 1478
UAGCACCAUUUGAAAUCAGUGUU&CUGGUGCAUUCAUUCGGUUCUUUGAAAUGAGAAUGUGGUGCUU
mir-29b
    ENSMUSG00000034832 2000 nt UTR 2 hits 51 1367
>ENSMUSG00000034832 hs-mir-29b 51
                       58
UAGCACCAUUUGAAAUCAGUGUU&GUACCUCAGCGUCGGGCCCGGGCCCGAGCUGCUCUGUGGUGCUU
```

```
>ENSMUSG00000034832 hs-mir-29b 1367 1374
UAGCACCAUUUGAAAUCAGUGUU&GGUGCAUUCAUUCAGCUCUUUGAAAAUGAGAACGUUGGUGCUU
mir-29b
     ENSRNOG0000011387 3807 nt UTR 2 hits 540 2751
______1___1___1____1
>ENSRNOG0000011387 hs-mir-29b 540 547
UAGCACCAUUUGAAAUCAGUGUU&CAUGCUCUACACAACAGCCUGAACCCGGCCUACGGUGGUGCUGA
20.70
>ENSRNOG00000011387 hs-mir-29b
                  2751
                      2758
UAGCACCAUUUGAAAUCAGUGUU&CAUGCUCUACACAACAGCCUGAACCCGGCCUACGGUGGUGCUGA
20.70
mir-29b SINFRUG00000143809 2000 nt UTR 3 hits 241 665 875
 >SINFRUG00000143809 hs-mir-29b 241
                      248
UAGCACCAUUUGAAAUCAGUGUU&GGCAAAUUCUGCAACACACCCUUGUCAAAAUAUCUGGUGCUU
>SINFRUG00000143809 hs-mir-29b 665 672
UAGCACCAUUUGAAAUCAGUGUU&CUGCUUUGUUUAUGCAAAAAUGAACUUUCUUGUGUUGGUGCUC
>SINFRUG00000143809 hs-mir-29b 875
                      882
```

UAGCACCAUUUGAAAUCAGUGUU&CUGGACUGUGAAUAUUACAUGUGUUAUUAUGUCUGUGGUGCUU

```
miRNA: mir-30b
Human predicted target: ENSG00000108604
Mouse predicted target: ENSMUSG00000020710
Rat predicted target: ENSRNOG0000010557
Fugu predicted target: SINFRUG00000136799
Hs Gene description: SWI/SNF-RELATED MATRIX-ASSOCIATED ACTIN-DEPENDENT
REGULATOR OF CHROMATIN D2; RSC6P; MAMMALIAN CHROMATIN REMODELING COMPLEX
BRG1-ASSOCIATED FACTOR 60B; SWP73-LIKE PROTEIN; CHROMATIN REMODELING
COMPLEX BAF60B SUBUNIT; SWI/SNF COMPLEX 60 KDA SUBUNIT B.
[Source:RefSeq;Acc:NM 003077]
mir-30b
     ENSG00000108604 2854 nt UTR 1 hits 316
>ENSG00000108604 hs-mir-30b 316 323
UGUAAACAUCCUACACUCAGC&AAGACAUUUCCGAACCAAAGGCUGCUGGGUUUGCAUGUUUACAG
mir-30b
      ENSMUSG00000020710 2879 nt UTR 1 hits 339
 ------1----1-----1
>ENSMUSG00000020710 hs-mir-30b 339 346
mir-30b
      ENSRNOG00000010557 2889 nt UTR 1 hits 331
 -----1----1
```

>ENSRNOG00000010557 hs-mir-30b 331 338
UGUAAACAUCCUACACUCAGC&CAGACAUUUCCGAACCAAAGGCUGCUGGGUUUGCAUGUUUACAG
(((((((((((((((((((((((((((((((((((((((
mir-30b SINFRUG00000136799 2000 nt UTR 2 hits 636 906
11
>SINFRUG00000136799 hs-mir-30b 636 643
UGUAAACAUCCUACACUCAGC&AAACGCCACGUGGUGUCUUAUUUUGAAAGGGUUUAUGUUUACC
.((((((((((((((((((((((((((((((((((((((
>SINFRUG00000136799 hs-mir-30b 906 913
UGUAAACAUCCUACACUCAGC&AUUAGUCAGAUUUUUCCUUUAGUCUCCUCUGGGAAUGUUUACAU
(((((((((((((((
miRNA: mir-30b
Human predicted target: ENSG00000109586
Mouse predicted target: ENSMUSG0000031608
Rat predicted target: ENSRNOG0000012037
Fugu predicted target: SINFRUG0000140751
Hs Gene description: POLYPEPTIDE N-ACETYLGALACTOSAMINYLTRANSFERASE 7; UDP-N-ACETYL-ALPHA-D-GALACTOSAMINE. [Source:RefSeq;Acc:NM_017423] NM_017423
mir-30b ENSG00000109586 4249 nt UTR 3 hits 185 221 2628
11
1
>ENSG00000109586 hs-mir-30b 185 192

UGUAAACAUCCUACACUCAGC&UGUGAUUUUACAAUAACAUUAUCAUCUGCAGUUACUGUUUACAA	
(((((((())))))))))))))))))))))-14	.30
>ENSG00000109586 hs-mir-30b 221 228	
UGUAAACAUCCUACACUCAGC&GUUUACAAGACUGCUUUUACCUUAAACUUUGUAGAUGUUUACAU	
((((((((((((((((.40
>ENSG00000109586 hs-mir-30b 2628 2635	
UGUAAACAUCCUACACUCAGC&GCCUAUUAGAAGCAAACAUGCCUUCAAAUCAAA	
((((((((.30
mir-30b ENSMUSG00000031608 3587 nt UTR 2 hits 361 395	
11	
>ENSMUSG00000031608 hs-mir-30b 361 368	
UGUAAACAUCCUACACUCAGC&UGUGAUUUUACAAUAACAUUAUCAUCUGCAGUGACUGUUUACAA	
(((((((((((((())))))))))))))))	.30
>ENSMUSG00000031608 hs-mir-30b 395 402	
UGUAAACAUCCUACACUCAGC&CUGUUUACAAAACUGCUCUUACCUUAAACUCUAGAUGUUUACAU	
((((((((((((.30
mir-30b ENSRNOG00000012037 2180 nt UTR 2 hits 191 225	
11	
>ENSRNOG0000012037 hs-mir-30b 191 198	
UGUAAACAUCCUACACUCAGC&GUGAUUUUUACAAUAAUAUUAUCAUCUGCAGUUACUGUUUACAA	
(((((((()))))))))))))))))))))))))	.30
>ENSRNOG0000012037 hs-mir-30b 225 232	
UGUAAACAUCCUACACUCAGC&CUGUUUACAAAACUGCUCUUACCUUAAACUCUAGAUGUUUACAU	

```
SINFRUG00000140751 2000 nt UTR 2 hits 149 1572
mir-30b
----1-----1-----1-----1
>SINFRUG00000140751 hs-mir-30b 149 156
UGUAAACAUCCUACACUCAGC&UCCACAUGUUUAAAUGUAGGGGACAAAUGUUUCUGUGUUUACU
>SINFRUG00000140751 hs-mir-30b 1572
                          1579
UGUAAACAUCCUACACUCAGC&CGGUGCAUUAUGGGGCUUCAUCAUUGUGUUCUUCCUGUUUACAU
miRNA: mir-30b
Human predicted target: ENSG00000114353
Mouse predicted target: ENSMUSG00000032562
Rat predicted target: ENSRNOG0000016592
Fugu predicted target: SINFRUG00000136406
Hs Gene description: GUANINE NUCLEOTIDE-BINDING PROTEIN G(I), ALPHA-2
SUBUNIT (ADENYLATE CYCLASE-INHIBITING G ALPHA PROTEIN).
[Source:SWISSPROT; Acc:P04899] NM 002070
mir-30b
     ENSG00000114353 2567 nt UTR 2 hits 405 682
 ------1----1
>ENSG00000114353 hs-mir-30b 405 412
UGUAAACAUCCUACACUCAGC&CCCAACACCAGCCCCUGCCCCAGCCCAAGUCCAAAUGUUUACAG
```

```
>ENSG00000114353 hs-mir-30b 682
                      689
UGUAAACAUCCUACACUCAGC&CUUCCAAGUGACUCCGUGCCUUGAGUGUGUGUGUGUGUUUACAC
mir-30b
     ENSMUSG00000032562 2992 nt UTR 4 hits 398 683 1880 2165
 -----1-----1-----1
-1-----1-----
>ENSMUSG00000032562 hs-mir-30b 398 405
UGUAAACAUCCUACACUCAGC&GCUUUGUCCAACACCAGCCCUGACCCAAGUCCAAAUGUUUACAG
>ENSMUSG00000032562 hs-mir-30b 683 690
UGUAAACAUCCUACACUCAGC&CUUUCCAGCGAUUCCGUGCCUUGAGUGUGUCUGCGUGUUUACAC
>ENSMUSG00000032562 hs-mir-30b 1880 1887
UGUAAACAUCCUACACUCAGC&GCUUUGUCCAACACCAGCCCUGACCCAAGUCCAAAUGUUUACAG
>ENSMUSG00000032562 hs-mir-30b 2165 2172
UGUAAACAUCCUACACUCAGC&CUUUCCAGCGAUUCCGUGCCUUGAGUGUGUCUGCGUGUUUACAC
mir-30b
     ENSRNOG00000016592 2294 nt UTR 2 hits 1202 1486
  -----1----1----1
>ENSRNOG00000016592 hs-mir-30b 1202
                      1209
UGUAAACAUCCUACACUCAGC&GCUUUGUCCAACACCAGCCCUGACCCAAGUCCAAAUGUUUACAG
>ENSRNOG00000016592 hs-mir-30b 1486 1493
```

UGUAAACAUCCUACACUCAGC&CUUUCCAGUGAUUCCGUGCCUUGAGUGUUUCUGCCUGUUUACAC SINFRUG00000136406 2000 nt UTR 2 hits 784 1749 mir-30b >SINFRUG00000136406 hs-mir-30b 784 791 UGUAAACAUCCUACACUCAGC&CUUUAUAUAUAUAUAUGUUUGUGCCUUGAUAUCUGUUUACAC >SINFRUG00000136406 hs-mir-30b 1749 1756 UGUAAACAUCCUACACUCAGC&AGAUGCAGACAGUAAAGACAUUGGAAGGUCAGGUAUGUUUACAA miRNA: mir-30b Human predicted target: ENSG00000132130 Mouse predicted target: ENSMUSG0000018698 Rat predicted target: ENSRNOG00000002812 Fugu predicted target: SINFRUG00000142325 Hs Gene description: LIM/HOMEOBOX PROTEIN LHX1 (HOMEOBOX PROTEIN LIM-1). [Source:SWISSPROT; Acc:P48742] NM 005568 mir-30b ENSG00000132130 2000 nt UTR 2 hits 845 1028 >ENSG00000132130 hs-mir-30b 845 852

UGUAAACAUCCUACACUCAGC&AAAAAAAAAAGACUAUUGAACUAAAAACAGUCAACUGUUUACGU

```
>ENSG00000132130 hs-mir-30b 1028 1035
UGUAAACAUCCUACACUCAGC&CUUUCGGCUCACUGUGCUAGUAUGUAAAAAGGUGUUGUUUACAC
ENSMUSG00000018698 2170 nt UTR 2 hits 938 1119
>ENSMUSG00000018698 hs-mir-30b 938
                    945
UGUAAACAUCCUACACUCAGC&AAAAAGAAAAGACUAUCGAACUAAAAACAGUCAACUGUUUACGU
>ENSMUSG00000018698 hs-mir-30b 1119 1126
UGUAAACAUCCUACACUCAGC&CUUGCGGCUCACUGUGCUAGUAUGUAAAAAGGUGUUGUUUACAC
mir-30b ENSRNOG00000002812 2086 nt UTR 2 hits 943 1126
>ENSRNOG00000002812 hs-mir-30b 943
                     950
UGUAAACAUCCUACACUCAGC&AAAAAAAAAAGACUAUUGAACUAAAAACAGUCAACUGUUUACGU
>ENSRNOG00000002812 hs-mir-30b 1126
                    1133
UGUAAACAUCCUACACUCAGC&CUUGCGGCUCACUGUGCUAGUAUGUAAAAAGGUGUUGUUUACAC
mir-30b
     SINFRUG00000142325 2000 nt UTR 2 hits 920 1095
 >SINFRUG00000142325 hs-mir-30b 920 927
```

UGUAAACAUCCUACACUCAGC&CACAACACAUUAACUGUUACAUUUGUGGCACUGAUGUUUACGA
(((((((((((((((((((((((((((((((((((((((
>SINFRUG00000142325 hs-mir-30b 1095 1102
UGUAAACAUCCUACACUCAGC&CAUUUUCAGCUAUUUACAACCUUGUUUAUUUGCAUUGUUUACC
.((((((()))))))10.70
miRNA: mir-30b
Human predicted target: ENSG00000136052
Mouse predicted target: ENSMUSG0000034591
Rat predicted target: ENSRNOG0000008713
Fugu predicted target: SINFRUG00000137981
Hs Gene description: NM_032148
mir-30b ENSG00000136052 2000 nt UTR 1 hits 277
11
>FNGG00000126052 ha min 20h 277 204
>ENSG00000136052 hs-mir-30b 277 284
UGUAAACAUCCUACACUCAGC&UCCAGCUCUGAAAUUAAUUAGGAAAGAAUAUAGGAUGUUUACAG
(((((((((((((((((((((((((((((((((((((((
mir-30b ENSMUSG00000034591 2000 nt UTR 1 hits 271
1
> TNGWIGG0000004501 h =
>ENSMUSG00000034591 hs-mir-30b 271 278
UGUAAACAUCCUACACUCAGC&UCACAUUCUAAAGUUAAUUAGGAAAGAAUUUAGGAUGUUUACAA
(((((((((((((((

miRNA: mir-30b

Human predicted target: ENSG00000185112

Mouse predicted target: ENSMUSG00000046546

Rat predicted target: ENSRNOG0000001728

Fugu predicted target: SINFRUG00000124355

Hs Gene description: NM 153690

mir-30b ENSG00000185112 2445 nt UTR 2 hits 519 609

```
>ENSG00000185112 hs-mir-30b 519
                    526
UGUAAACAUCCUACACUCAGC&UAGCCCUUGGUUCUUUUUGGUGCAAGAAUUCUGGCUGUUUACC
>ENSG00000185112 hs-mir-30b
                609
                    616
UGUAAACAUCCUACACUCAGC&UGGGGGGGGGGGGGAGAUGAAAGAGUCGCGUUUUGUUUACAG
mir-30b
     ENSMUSG00000046546 2846 nt UTR 4 hits 487 577 1366 1391
 -----11-----1---1
>ENSMUSG00000046546 hs-mir-30b 487 494
UGUAAACAUCCUACACUCAGC&CUGCCCCCAGUUCUUUCGGAUAGGGGAGCUUGGGCUGUUUACC
>ENSMUSG00000046546 hs-mir-30b 577
                      584
UGUAAACAUCCUACACUCAGC&CUUGGGGGGGGGGGCAGUGUAUGAAAGUCGUGUUUUGUUUACAG
>ENSMUSG00000046546 hs-mir-30b 1366 1373
UGUAAACAUCCUACACUCAGC&UUUGGAGAGGUCAGUGUAAAUUCAACUGCCCACGCUGUUUACAC
>ENSMUSG00000046546 hs-mir-30b 1391 1398
UGUAAACAUCCUACACUCAGC&CUGCCCACGCUGUUUACACGAGUCACGUGGAUGGCUGUUUACU
mir-30b
     ENSRNOG0000001728 2000 nt UTR 3 hits 511 604 1397
```

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>ENSRNOG0000001728 hs-mir-30b 511 518
UGUAAACAUCCUACACUCAGC&CUGCCCCCAGUUCUUUUGGAUAUGAGAGCUUGGGCUGUUUACC
>ENSRNOG0000001728 hs-mir-30b 604
                    611
>ENSRNOG0000001728 hs-mir-30b 1397 1404
UGUAAACAUCCUACACUCAGC&AAUUCAACUGCCCACACUGUUUAGACGUGUAUGGCUGUUUACU
SINFRUG00000124355 2000 nt UTR 2 hits 329 1397
  .-----1----1
>SINFRUG00000124355 hs-mir-30b 329
                    336
UGUAAACAUCCUACACUCAGC&UGGGAAUCCGAGCGCAGGUUUUGGGGACGCUGCGUGUUUACAA
>SINFRUG00000124355 hs-mir-30b 1397 1404
UGUAAACAUCCUACACUCAGC&UGAGAUGAGAGAUUAUUUAAAUGAAUCCACCAACUUGUUUACAU
```

miRNA: mir-34

Human predicted target: ENSG00000117308

Mouse predicted target: ENSMUSG00000028671

Rat predicted target: ENSRNOG00000009712

```
Fugu predicted target: SINFRUG00000129461
Hs Gene description: UDP-GLUCOSE 4-EPIMERASE (EC 5.1.3.2)
(GALACTOWALDENASE) (UDP- GALACTOSE 4-EPIMERASE).
[Source:SWISSPROT; Acc:Q14376] NM 000403
mir-34 ENSG00000117308 2350 nt UTR 2 hits 510 1507
  >ENSG00000117308 hs-mir-34 510 517
UGGCAGUGUCUUAGCUGGUUGU&ACAUGGAGACAGAAGACGAGACACUCCUCCCCCACUGCCU
>ENSG00000117308 hs-mir-34 1507 1514
UGGCAGUGUCUUAGCUGGUUGU&CUCCCCAUGGCACUGGAGUAUGGCCAGGUCCUUGGCACUGCCAU
mir-34
      ENSMUSG00000028671 2319 nt UTR 2 hits 1443 1880
 .______1____1_____1
>ENSMUSG00000028671 hs-mir-34 1443 1450
UGGCAGUGUCUUAGCUGGUUGU&CUCCCCGUGGCACUGAAGGAUGGCCAGGUCCUUGGCACUGCCAU
>ENSMUSG00000028671 hs-mir-34 1880 1887
UGGCAGUGUCUUAGCUGGUUGU&AGGAGACUGCUGGAGGCUUGAAGGGAGCAGGUGGGCACUGCCU
ENSRNOG00000009712 2319 nt UTR 2 hits 1438 1902
mir-34
   -----1----1-----1
--1-----
>ENSRNOG00000009712 hs-mir-34 1438 1445
```

UGGCAGUGUCUUAGCUGGUUGU&CUCGCCGUGGCAUUGAAGGAUGGCCAGGUCCUUGGCACUGCCAU

```
>ENSRNOG00000009712 hs-mir-34 1902 1909
UGGCAGUGUCUUAGCUGGUUGU&AGGAGACUGCUGGAGGCUUGAAGGGAGCAGGUGGGCACUGCCC
mir-34
      SINFRUG00000129461 2000 nt UTR 1 hits 1991
----1
>SINFRUG00000129461 hs-mir-34 1991 1998
UGGCAGUGUCUUAGCUGGUUGU&GUCUUCUCCUCCAGGCAGCCUCAGAGGUGGUUCAACACUGCCGA
miRNA: mir-34
Human predicted target: ENSG00000148400
Mouse predicted target: ENSMUSG00000026923
Rat predicted target: ENSRNOG00000019322
Fugu predicted target: SINFRUG00000127119
Hs Gene description: NEUROGENIC LOCUS NOTCH HOMOLOG PROTEIN 1 PRECURSOR
(NOTCH 1) (HN1) (TRANSLOCATION-ASSOCIATED NOTCH PROTEIN TAN-1).
[Source:SWISSPROT; Acc:P46531] NM 017617
mir-34
      ENSG00000148400
                3627 nt UTR 4 hits 909 2299 2398 2714
>ENSG00000148400 hs-mir-34 909 916
UGGCAGUGUCUUAGCUGGUUGU&CACACGGAGGCAUCCUACCCUUUUCUGGGGAAAGACACUGCCU
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>ENSG00000148400 hs-mir-34 2299 2306
UGGCAGUGUCUUAGCUGGUUGU&GCCAGCCUCACACAAGGGUGGGCCCCUUCUCUCCCCACUGCCU
>ENSG00000148400 hs-mir-34 2398 2405
UGGCAGUGUCUUAGCUGGUUGU&GUGGGGAGUCUGAGAUCCCUCUUUGGAUUGCAAAGCACUGCCU
>ENSG00000148400 hs-mir-34 2714
                  2721
UGGCAGUGUCUUAGCUGGUUGU&CAUCACUCAGUACAGCCACAGACAGCCUGAGCGUCCACUGCCAA
ENSMUSG00000026923 3625 nt UTR 3 hits 187 458 800
>ENSMUSG00000026923 hs-mir-34 187
                    194
>ENSMUSG00000026923 hs-mir-34 458 465
UGGCAGUGUCUUAGCUGGUUGU&AACUGCCAUGGCCAGAAUUGCCCCUCCCCCACACUCACUGCCC
>ENSMUSG00000026923 hs-mir-34
                800
                    807
UGGCAGUGUCUUAGCUGGUUGU&UAAGCCAUGCAGGGUGUGGUGCCUCCUAGAGAAAACACUGCCU
mir-34
     ENSRNOG00000019322 2384 nt UTR 3 hits 193 523 890
-----
>ENSRNOG00000019322 hs-mir-34 193
                    200
```

UGGCAGUGUCUUAGCUGGUUGU&AGUAUUUAUUUAUGUACUUUUAUUUUCCACAGAAACACUGCCU >ENSRNOG00000019322 hs-mir-34 523 530 UGGCAGUGUCUUAGCUGGUUGU&AGAUUUCCCCCUCCCCAGAUGCCUGCUACCCCACUCACUGCCC >ENSRNOG00000019322 hs-mir-34 890 897 UGGCAGUGUCUUAGCUGGUUGU&AAGCCAAGUGGGGUGUGCCUCCUGGAGAAUGACACUGCCU mir-34 SINFRUG00000127119 2000 nt UTR 1 hits 1164 -----1----1 >SINFRUG00000127119 hs-mir-34 1164 1171 UGGCAGUGUCUUAGCUGGUUGU&CAGAGUAACACCGCCCUCUGGUGUUUACUAGGUGACACUGCCAU miRNA: mir-34 Human predicted target: ENSG00000168758 Mouse predicted target: ENSMUSG00000026121 Rat predicted target: ENSRNOG00000016254

Fugu predicted target: SINFRUG00000125424

Hs Gene description: SEMA DOMAIN, IMMUNOGLOBULIN DOMAIN (IG), TRANSMEMBRANE DOMAIN TM. [Source:RefSeq; Acc: NM 017789] NM 017789

mir-34 ENSG00000168758 2884 nt UTR 2 hits 162 465

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>ENSG00000168758 hs-mir-34 162 169
>ENSG00000168758 hs-mir-34 465
                   472
UGGCAGUGUCUUAGCUGGUUGU&GGGAAGGGGUCGUAUCACUUUGUCUCCUACCCCCACUGCCC
.((((((...((...&........))..))))...))))...)))))...
mir-34
     ENSMUSG00000026121 2000 nt UTR 2 hits 119 164
>ENSMUSG00000026121 hs-mir-34 119
                    126
UGGCAGUGUCUUAGCUGGUUGU&GACAUGGCAGGGGCACUUGCUCUGCCUGGGACAGACACUGCCC
>ENSMUSG00000026121 hs-mir-34 164
                    171
UGGCAGUGUCUUAGCUGGUUGU&CAUUUGCCCGGCCGUGAGGACCUGCUCAGCAUGGGCACUGCCAC
mir-34
     ENSRNOG00000016254 2862 nt UTR 1 hits 136
-----
>ENSRNOG00000016254 hs-mir-34 136 143
UGGCAGUGUCUUAGCUGGUUGU&CAUUUGCCCAGCCAUGAGGACCUGCUCAGCAUGGGCACUGCCAC
mir-34
     SINFRUG00000125424 2000 nt UTR 3 hits 1158 1174 1644
 -----2-----1-----1
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>SINFRUG00000125424 hs-mir-34 1158 1165
>SINFRUG00000125424 hs-mir-34 1174
                       1181
UGGCAGUGUCUUAGCUGGUUGU&GGAGAGGGAGGAAAACUUGCACUGCCAAGAACGGACACUGCCC
>SINFRUG00000125424 hs-mir-34 1644
                       1651
UGGCAGUGUCUUAGCUGGUUGU&AGUCAAAUAUUCUGCAUUGAUGUUGACUAAUUGCACACUGCCC
miRNA: mir-34
Human predicted target: ENSG00000179036
Mouse predicted target: ENSMUSG00000020894
Rat predicted target: ENSRNOG00000006989
Fugu predicted target: SINFRUG00000131186
Hs Gene description: VESICLE-ASSOCIATED MEMBRANE PROTEIN 2 (VAMP-2)
(SYNAPTOBREVIN 2). [Source:SWISSPROT; Acc: P19065] NM 014232
      ENSG00000179036
                  3727 nt UTR
                           6 hits 1129 1256 1309 3456
mir-34
3583 3636
 ------1-1-1-----
  >ENSG00000179036 hs-mir-34 1129 1136
UGGCAGUGUCUUAGCUGGUUGU&AGAGGGGUGGCUACCAGUGUGUGUGUGGGGGUCAUCACUGCCU
```

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>ENSG00000179036 hs-mir-34 1256 1263
UGGCAGUGUCUUAGCUGGUUGU&AACCCUCCCCCAAUUUGGGGGGUGUUGCCCCAUCACUGCCC
>ENSG00000179036 hs-mir-34 1309 1316
UGGCAGUGUCUUAGCUGGUUGU&ACUGCCCCCCUGAAUUUAGGGUGGGGGUACUAGUCACUGCCAA
>ENSG00000179036 hs-mir-34 3456
                   3463
UGGCAGUGUCUUAGCUGGUUGU&AGAGGGGUGGCUACCAGUGUGUGUGUGGGGGUCAUCACUGCCU
>ENSG00000179036 hs-mir-34 3583
                   3590
UGGCAGUGUCUUAGCUGGUUGU&AACCCUCCUCCCCAAUUUGGGGGGGUGUUGCCCCAUCACUGCCC
>ENSG00000179036 hs-mir-34 3636 3643
UGGCAGUGUCUUAGCUGGUUGU&ACUGCCCCCCUGAAUUUAGGGUGGGGGUACUAGUCACUGCCAA
mir-34
     ENSMUSG00000020894 3731 nt UTR 3 hits 1116 1246 1298
              ----1-1
>ENSMUSG00000020894 hs-mir-34 1116
                    1123
UGGCAGUGUCUUAGCUGGUUGU&UUUGAGGAGGGGUGGCUCCAGUGUGUGGGGGUCAUCACUGCCU
>ENSMUSG00000020894 hs-mir-34 1246
                    1253
```

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>ENSMUSG00000020894 hs-mir-34 1298 1305
UGGCAGUGUCUUAGCUGGUUGU&GACUGCCCCCUGUAUUCAGGGUGGGGGUACUAGUCACUGCCAA
ENSRNOG0000006989 4248 nt UTR 4 hits 1629 1761 1813 2899
mir-34
  _____1___1___
>ENSRNOG00000006989 hs-mir-34 1629
                    1636
UGGCAGUGUCUUAGCUGGUUGU&UGAGGAGGGGUGGCUCUAGUGUGUGUGGGGGUCAUCACUGCCU
>ENSRNOG00000006989 hs-mir-34 1761 1768
UGGCAGUGUCUUAGCUGGUUGU&CCUCCCCAAUCCUGGGGGGGGGUAUUACCCCCCAUCACUGCCC
>ENSRNOG00000006989 hs-mir-34 1813 1820
UGGCAGUGUCUUAGCUGGUUGU&GACUGCCCCCUGUAUUCAGGGUGGGGGUACUAGUCACUGCCAA
>ENSRNOG00000006989 hs-mir-34 2899 2906
UGGCAGUGUCUUAGCUGGUUGU&GGUUGCCCUCUGUAUUCAGGUCAUGAGGGACUAGUCACUGCCAG
mir-34
     SINFRUG00000131186 2000 nt UTR 2 hits 903 1844
1----
>SINFRUG00000131186 hs-mir-34 903
                     910
>SINFRUG00000131186 hs-mir-34 1844 1851
```

UGGCAGUGUCUUAGCUGGUUGU&CUGGUGCGUUUUUUUGUAAUUCCGCUGUGCGUUAUACACUGCCAA miRNA: mir-96 Human predicted target: ENSG00000103365 Mouse predicted target: ENSMUSG00000030872 Rat predicted target: ENSRNOG00000018599 Fugu predicted target: SINFRUG00000145164 Hs Gene description: ADP-RIBOSYLATION FACTOR BINDING PROTEIN GGA2 (GOLGI-LOCALIZED, GAMMA EAR-CONTAINING, ARF-BINDING PROTEIN 2) (GAMMA-ADAPTIN RELATED PROTEIN 2) (VEAR) (VHS DOMAIN AND EAR DOMAIN OF GAMMA-ADAPTIN). [Source:SWISSPROT; Acc:Q9UJY4] NM 138640 mir-96 ENSG00000103365 2000 nt UTR 1 hits 90 >ENSG00000103365 hs-mir-96 90 97 UUUGGCACUAGCACAUUUUUGC&UCUAGUCAGGACUAAUCACGGUGUUUCAGUGCGGAGUGCCAAGA ENSMUSG00000030872 2923 nt UTR 1 hits 83 mir-96 >ENSMUSG00000030872 hs-mir-96 83 90 UUUGGCACUAGCACAUUUUUGC&CUGUCUGGUCGGGACUUGUUGUAAUGUAGUGCAGAGUGCCAAGG ENSRNOG00000018599 2000 nt UTR 1 hits 87 mir-96

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>ENSRNOG00000018599 hs-mir-96 87 94
UUUGGCACUAGCACAUUUUUGC&CUGUUGGUUGGGACUCCUUGUAAUGUCGUGCAGAGUGCCAAGA
mir-96
      SINFRUG00000145164 2000 nt UTR 1 hits 925
_____1
>SINFRUG00000145164 hs-mir-96 925
                          932
UUUGGCACUAGCACAUUUUUGC&CUAUGUACAUUUGUGUAACAGGGGUGUUAGAUAAAGUGCCAAAU
miRNA: mir-96
Human predicted target: ENSG00000103723
Mouse predicted target: ENSMUSG00000025586
Rat predicted target: ENSRNOG00000019161
Fugu predicted target: SINFRUG00000122270
Hs Gene description: CYTOPLASMIC POLYADENYLATION ELEMENT BINDING PROTEIN;
CYTOPLASMIC POLYADENYLATION ELEMENT-BINDING PROTEIN.
[Source:RefSeq;Acc:NM 030594] NM 030594
mir-96
     ENSG00000103723 2319 nt UTR 1 hits 1183
  _____1
>ENSG00000103723 hs-mir-96 1183 1190
UUUGGCACUAGCACAUUUUUGC&CCACAAAAACUACUUGCCCCUCCUAGGGAAGCUGUGUGCCAAAG
```

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mir-96 ENSMUSG00000025586 2898 nt UTR 2 hits 41 1107
>ENSMUSG00000025586 hs-mir-96 41 48
UUUGGCACUAGCACAUUUUUGC&CAGCUAGAGGAGCUGGCCUUGCCCAGUGUCCUGUGGUGCCAAAG
>ENSMUSG00000025586 hs-mir-96 1107 1114
UUUGGCACUAGCACAUUUUUGC&AUUUAACGAUUACUUGCCUCUUUAGGGAAGCUGUGUGCCAAAG
mir-96
     ENSRNOG00000019161 3299 nt UTR 2 hits 1103 2340
  -----
>ENSRNOG00000019161 hs-mir-96 1103 1110
UUUGGCACUAGCACAUUUUUGC&AUUUAGUUACUACUUGCCCCUCUUAGGGAAGCUGUGUGCCAAAG
>ENSRNOG00000019161 hs-mir-96 2340 2347
UUUGGCACUAGCACAUUUUUGC&AUUUAGUUACUACUUGCCCCUCUUAGGGAAGCUGUGUGCCAAAG
mir-96 SINFRUG00000122270 2000 nt UTR 1 hits 1131
 -----1------
>SINFRUG00000122270 hs-mir-96 1131 1138
UUUGGCACUAGCACAUUUUUGC&CCUGUUCCAGUUGGAUAUAAAUGCAUAAAUAAGCUGUGCCAAAG
```

miRNA: mir-96 Human predicted target: ENSG00000169992 Mouse predicted target: ENSMUSG00000019462 Rat predicted target: ENSRNOG00000015430 Fugu predicted target: SINFRUG00000131198 Fugu predicted target: SINFRUG00000131199 Fugu predicted target: SINFRUG00000146652 Hs Gene description: NEUROLIGIN 2. [Source:SPTREMBL; Acc:Q8NFZ4] mir-96 ENSG00000169992 2212 nt UTR 3 hits 1066 1111 1639 .-----1-----1-----1 >ENSG00000169992 hs-mir-96 1066 1073 UUUGGCACUAGCACAUUUUUGC&AGCCUUUUCCCCAGGCCUCAGAGCAUUGCUCAUCCGUGCCAAAC >ENSG00000169992 hs-mir-96 1111 1118 UUUGGCACUAGCACAUUUUUGC&GGGUAGGUGGAUUUGAGCGGAAAGACUCCCAAAAUGUGCCAAGA >ENSG00000169992 hs-mir-96 1639 1646 UUUGGCACUAGCACAUUUUUGC&AGAGUCCUCAUCUGCUGGCAUUUUGUGGGGUGUUAGUGCCAAAC mir-96 ENSMUSG00000019462 2000 nt UTR 3 hits 1242 1281 1821 -----1-1-----1-

>ENSMUSG00000019462 hs-mir-96 1242 1249

```
UUUGGCACUAGCACAUUUUUGC&GCCUUUUCCUCAGUCCUUGAGAUCAUUGCUCAUCCGUGCCAAAC
>ENSMUSG00000019462 hs-mir-96 1281 1288
UUUGGCACUAGCACAUUUUUGC&CAAACUGGGUAGAUGGGUUGGGAGACUCUCAAAAUGUGCCAAGG
>ENSMUSG00000019462 hs-mir-96 1821 1828
UUUGGCACUAGCACAUUUUUGC&UCUUCAUGUAUUGUUUGGCUUUCUGAGGGAUGUUAGUGCCAAAC
ENSRNOG00000015430 2000 nt UTR 2 hits 1226 1799
  >ENSRNOG00000015430 hs-mir-96 1226 1233
UUUGGCACUAGCACAUUUUUGC&GCCUUUUCCUCAGACCUUGAGAUCAUUGCUCAUCCGUGCCAAAC
>ENSRNOG00000015430 hs-mir-96 1799 1806
UUUGGCACUAGCACAUUUUUGC&UCUCCAUGUGUUGUUUGGCUUUCUGAGGGAUGUUAGUGCCAAAC
mir-96
    SINFRUG00000131198 2000 nt UTR 1 hits 1320
  -----1----1
>SINFRUG00000131198 hs-mir-96 1320 1327
UUUGGCACUAGCACAUUUUUGC&AGCAGAGGGUAACAUGAUCCAGACUGUUAUUGACAGUGCCAAU
SINFRUG00000131199 2000 nt UTR 2 hits 1051 1148
mir-96
```

>SINFRUG00000131199 hs-mir-96 1051 1058
UUUGGCACUAGCACAUUUUUGC&GAUAUUCUGAUAUCUCGUUUUUACCAGCAUUCUUGGUGCCAAGU
((((((((((((())))))))))))))))))
>SINFRUG00000131199 hs-mir-96 1148 1155
UUUGGCACUAGCACAUUUUUGC&CAACUUGACUGUCAAAGAUUUACCAUCAUAAAAAAGUGCCAAGC
((((((((((())))))))))17.20
mir-96 SINFRUG00000146652 2000 nt UTR 3 hits 549 641 1009
11111
>SINFRUG00000146652 hs-mir-96 549 556
UUUGGCACUAGCACAUUUUUGC&UUAAAACACUGAUCUCAUUUUUACCAGCGUUCUUGGUGCCAAGU
(((((((((((((((((((((((((((((((((((((((
>SINFRUG00000146652 hs-mir-96 641 648
UUUGGCACUAGCACAUUUUUGC&AAAAUAUUAAGAGAAGCUGUGUGUUCUUAUAAGAAGUGCCAAAC
(((((((((((((((((((((((((((((((((((((((
>SINFRUG00000146652 hs-mir-96 1009 1016
UUUGGCACUAGCACAUUUUUGC&GUUGUUUGUUUGAUUCUCUGAGUCCUGGCAGCCAUGUGCCAAGA
((((((((()((((&))))))))))))))

miRNA: mir-100

Human predicted target: ENSG00000132510

Mouse predicted target: ENSMUSG0000018476

Rat predicted target: ENSRNOG00000010142

Fugu predicted target: SINFRUG00000131193
Fugu predicted target: SINFRUG00000148279
mir-100 ENSG00000132510 3275 nt UTR 1 hits 320
11
>ENSG00000132510 hs-mir-100 320 327
AACCCGUAGAUCCGAACUUGUG&ACAAGGACCAGGCUCCGGCGGGGGGGGGG
(((((((((((((((((((((((((((((((((((((((
mir-100 ENSMUSG0000018476 2147 nt UTR 1 hits 319
1
>ENSMUSG0000018476 hs-mir-100 319 326
AACCCGUAGAUCCGAACUUGUG&ACAAGGACCAGGCUCCGGCGGCGGGGGGGGCACAUACGGGUUC
(((((((((((((((((((((((((((((((((((((((
mir-100 ENSRNOG00000010142 2000 nt UTR 1 hits 308
1

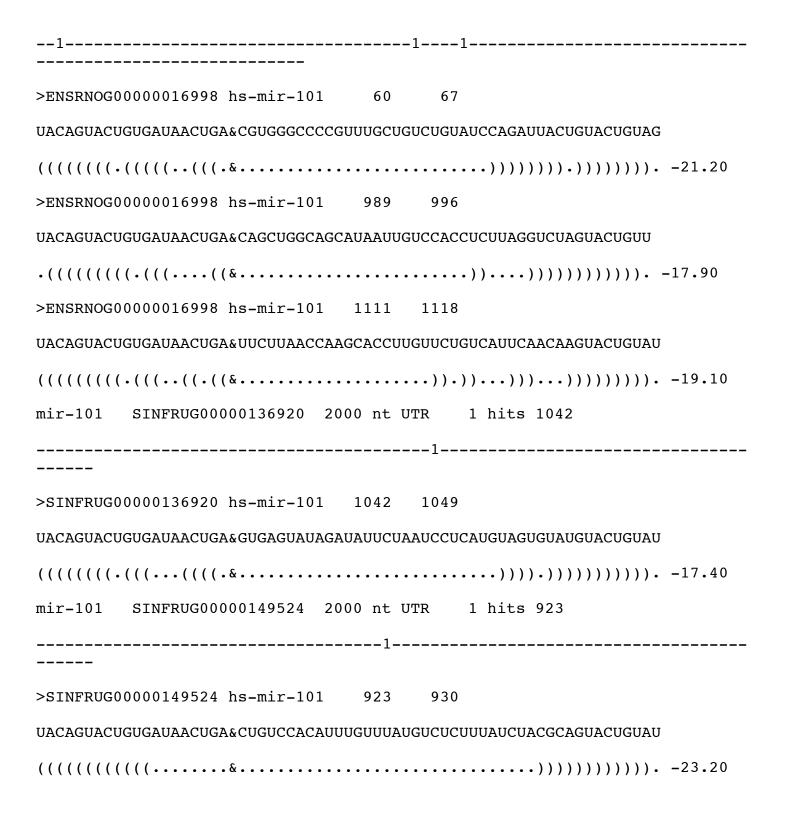
>ENSRNOG0000010142 hs-mir-100 308 315
AACCCGUAGAUCCGAACUUGUG&ACAAGGACCAGGCUCCGGCGGCGGGGGGGGCACAUACGGGUUC
(((((((((((((((((((((((((((((((((((((((
mir-100 SINFRUG00000131193 2000 nt UTR 1 hits 1440
1
>SINFRUG00000131193 hs-mir-100 1440 1447
AACCCGUAGAUCCGAACUUGUG&AAAAAAAAAUCCUACUUUUGUCAGCUUCUCUAAAAUACGGGUUA
((((((((((()))))))))))))))

mir-100 SINFRUG00000148279 2000 nt UTR 1 hits 642 >SINFRUG00000148279 hs-mir-100 642 649 AACCCGUAGAUCCGAACUUGUG&AAAAAACGUACAAAUGGUCGGAAUGCUUCAAAUCAUACGGGUUU miRNA: mir-100 Human predicted target: ENSG00000163376 Mouse predicted target: ENSMUSG00000030031 Rat predicted target: ENSRNOG00000013390 Fugu predicted target: SINFRUG00000125449 Hs Gene description: T-CELL ACTIVATION KELCH REPEAT PROTEIN. [Source:RefSeq;Acc:NM_032505] NM_032505 mir-100 ENSG00000163376 4825 nt UTR 1 hits 379 ------1----1 >ENSG00000163376 hs-mir-100 379 386 AACCCGUAGAUCCGAACUUGUG&GUCUAAACUUGUUUGAUGUGACUUUUAAUUUUAAAUACGGGUA mir-100 ENSMUSG00000030031 2000 nt UTR 1 hits 358 >ENSMUSG00000030031 hs-mir-100 358 365

AACCCGUAGAUCCGAACUUGUG&GACAUCCAAACUGGUUAACGUGACUUUCUUUUAACUACGGGUA

```
ENSRNOG00000013390 2000 nt UTR 1 hits 362
mir-100
 -----1----1
>ENSRNOG00000013390 hs-mir-100 362
                       369
mir-100
    SINFRUG00000125449 2000 nt UTR 1 hits 441
 _____1___1____1_____
>SINFRUG00000125449 hs-mir-100 441 448
AACCCGUAGAUCCGAACUUGUG&CAGAAAUGGCUAUAUAUAAACUCAAACUAUAUAAACUACGGGUA
miRNA: mir-101
Human predicted target: ENSG00000124788
Mouse predicted target: ENSMUSG00000046876
Rat predicted target: ENSRNOG00000016998
Fugu predicted target: SINFRUG00000136920
Fugu predicted target: SINFRUG00000149524
Hs Gene description: ATAXIN-1 (SPINOCEREBELLAR ATAXIA TYPE 1 PROTEIN).
[Source:SWISSPROT; Acc:P54253]
     ENSG00000124788 9219 nt UTR 3 hits 58 1000 1174
mir-101
```

>ENSG00000124788 hs-mir-101 58 65 UACAGUACUGUGAUAACUGA&CGUGGCUCUCCCUUAUCAUUUGUAUCCAGAUUACUGUACUGUAG >ENSG00000124788 hs-mir-101 1000 1007 UACAGUACUGUGAUAACUGA&UUGAGUUUGCGAAAUCUUUUUGUCUUUGAACUCUAGUACUGUU >ENSG00000124788 hs-mir-101 1174 1181 UACAGUACUGUGAUAACUGA&UUUAUUACCAAGCAUCUUGGUCUCUCAUUCAACAAGUACUGUAU mir-101 ENSMUSG00000046876 2589 nt UTR 3 hits 59 1030 1215 >ENSMUSG00000046876 hs-mir-101 59 66 UACAGUACUGUGAUAACUGA&CGGGGCCUCCUUUUACUGUCUGUAUCCAGAUUACUGUACUGUAG >ENSMUSG00000046876 hs-mir-101 1030 1037 UACAGUACUGUGAUAACUGA&UGUGCCGGCAGCAUCUUUUCUGUAUUUUAGGUCUAGUACUGUU >ENSMUSG00000046876 hs-mir-101 1215 1222 UACAGUACUGUGAUAACUGA&UUCUUAACCAAGCAUCUUGGUCUGUCAUUCAACAAGUACUGUAU mir-101 ENSRNOG0000016998 2534 nt UTR 3 hits 60 989 1111



miRNA: mir-101

Human predicted target: ENSG00000127314 Mouse predicted target: ENSMUSG00000020200 Rat predicted target: ENSRNOG00000007048 Fugu predicted target: SINFRUG00000129510 Hs Gene description: RAS-RELATED PROTEIN RAP-1 (GTP-BINDING PROTEIN SMG P21B). [Source:SWISSPROT; Acc: P09526] NM 015646 3273 nt UTR 2 hits 309 965 mir-101 ENSG00000127314 -----1----1 >ENSG00000127314 hs-mir-101 309 316 UACAGUACUGUGAUAACUGA&UUCAUCCACCAAUGUUGUACAUGUAUGAAAAUGGUGUACUGUAU >ENSG00000127314 hs-mir-101 965 972 UACAGUACUGUGAUAACUGA&GUAACGUUUUGGUUGAGAUGUUAAAUGGUGGACGAGUACUGUGG mir-101 ENSMUSG00000020200 3340 nt UTR 4 hits 305 961 2865 3178 -----1-----._____1____1____1____1 >ENSMUSG00000020200 hs-mir-101 305 312 UACAGUACUGUGAUAACUGA&UUCAUCCACCAAUGUUGUACAUGUAUGAAAAUGGUGUACUGUAU >ENSMUSG00000020200 hs-mir-101 961 968 UACAGUACUGUGAUAACUGA&GUAACGUUUCGGUUGAGAUGUUAACUGGUGGACGAGUACUGUGG >ENSMUSG00000020200 hs-mir-101 2865 2872

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UACAGUACUGUGAUAACUGA&AGACUUUAUCUUGCUGUUUCCUUUCGUUCUUUAUUGUACUGUU
>ENSMUSG00000020200 hs-mir-101 3178 3185
UACAGUACUGUGAUAACUGA&UUCAUCCACCAAUGUUGUACAUGUAUGAAAAUGGUGUACUGUAU
ENSRNOG00000007048 3254 nt UTR 4 hits 310 966 2796 3114
mir-101
 -----1----1-----
-----1-----1
>ENSRNOG00000007048 hs-mir-101 310 317
UACAGUACUGUGAUAACUGA&UUCAUCCACCAAUGUUGUACAUGUAUGAAAAUGGUGUACUGUAU
>ENSRNOG00000007048 hs-mir-101 966
                       973
UACAGUACUGUGAUAACUGA&GUAACGUUUUGGUUGAGAUGUUAAAUGGUGGACGAGUACUGUGG
>ENSRNOG00000007048 hs-mir-101 2796 2803
UACAGUACUGUGAUAACUGA&AACCUUUAUCUUAGUGUUUCCUUUCAUUCUUUAUUGUACUGUU
>ENSRNOG00000007048 hs-mir-101 3114 3121
UACAGUACUGUGAUAACUGA&UUCAUCCACCAAUGUUGUACAUGUAUGAAAAUGGUGUACUGUAU
SINFRUG00000129510 2000 nt UTR 2 hits 1467 1905
mir-101
------1-----1
__1__
>SINFRUG00000129510 hs-mir-101 1467 1474
```

UACAGUACUGUGAUAACUGA&UGAUGGCCCUGUUGCCCCAGGGUGAGGGAAGAUGUGUACUGUGC

```
>SINFRUG00000129510 hs-mir-101 1905 1912
UACAGUACUGUGAUAACUGA&CUGCUGUUGAGUGUUGAGUACUGCAGUACUUAGAAGUACUGUU
miRNA: mir-101
Human predicted target: ENSG00000170242
Mouse predicted target: ENSMUSG00000045151
Rat predicted target: ENSRNOG00000016651
Fugu predicted target: SINFRUG00000136891
Fugu predicted target: SINFRUG00000136901
Hs Gene description: NM 017944
mir-101
      ENSG00000170242 2393 nt UTR 1 hits 205
-----1-----
 -----
>ENSG00000170242 hs-mir-101
                    205
                        212
UACAGUACUGUGAUAACUGA&UUGACUCGGAAUCAUGUUGUGCACUAUAGUCAAAUGUACUGUAA
mir-101
      ENSMUSG00000045151 3265 nt UTR 1 hits 198
>ENSMUSG00000045151 hs-mir-101 198
                          205
UACAGUACUGUGAUAACUGA&UUGACUUGGAAUCAUGUUGUGCACUAUGGUCAGAUGUACUGUAA
```

mir-101 ENSRNOG00000016651 3229 nt UTR 1 hits 199 >ENSRNOG00000016651 hs-mir-101 199 206 UACAGUACUGUGAUAACUGA&UUGACUUGGAAUCAUGUUGUGCACUAUAGUCAGAUGUACUGUAA mir-101 SINFRUG00000136891 2000 nt UTR 1 hits 480 .-----1---1----1 >SINFRUG00000136891 hs-mir-101 480 487 UACAGUACUGUGAUAACUGA&CAGCUCAGAAACUCUGUUGUGCACUAUAGUGUAUUGUACUGUAA mir-101 SINFRUG00000136901 2000 nt UTR 1 hits 188 >SINFRUG00000136901 hs-mir-101 188 195 UACAGUACUGUGAUAACUGA&CAGCUCAGAAACUCUGUUGUGCACUAUAGUGUAUUGUACUGUAA

miRNA: mir-103

Human predicted target: ENSG00000141433

Mouse predicted target: ENSMUSG00000024256

Rat predicted target: ENSRNOG0000014921

Fugu predicted target: SINFRUG00000134427

```
HS Gene description: PITUITARY ADENYLATE CYCLASE ACTIVATING POLYPEPTIDE
PRECURSOR (PACAP) [CONTAINS: PACAP-RELATED PEPTIDE (PRP-48); PITUITARY
ADENYLATE CYCLASE ACTIVATING POLYPEPTIDE-27 (PACAP-27) (PACAP27);
PITUITARY ADENYLATE CYCLASE ACTIVATING POLYPEPTIDE-38 (PACAP-38)
(PACAP38)]. [Source:SWISSPROT;Acc:P18509]
                              NM 001117
mir-103 ENSG00000141433 3418 nt UTR 2 hits 1921 2120
>ENSG00000141433 hs-mir-103 1921 1928
AGCAGCAUUGUACAGGGCUAUGA&AAACAGAAUUGGAUUUGCAUUCCCAGGCGGGAUGGAUGCUGCC
>ENSG00000141433 hs-mir-103 2120 2127
AGCAGCAUUGUACAGGGCUAUGA&CCACGAAUCACAGAUGGCUAUUUAGUGGCCCUACAAUGCUGCA
mir-103
      ENSMUSG00000024256 2000 nt UTR 2 hits 1400 1821
 >ENSMUSG00000024256 hs-mir-103 1400 1407
AGCAGCAUUGUACAGGGCUAUGA&CCAAUCUUUGUCAUAUUAGAAUGUGUAGUGUUCCAAUGCUGCUC
24,20
>ENSMUSG00000024256 hs-mir-103 1821 1828
AGCAGCAUUGUACAGGGCUAUGA&AACAACUGUAUUUGCAUUCCCAGGUGGGUGGAUGGAUGCUGCC
mir-103
      ENSRNOG00000014921 2000 nt UTR 2 hits 1437 1880
------1-----1
-1---
```

>ENSRNOG00000014921 hs-mir-103 1437 1444

AGCAGCAUUGUACAGGGCUAUGA&CCAAUCUUUGUCAUAUUAGAAUGUGUAGUGUUCCAAUGCUGCUC 24,20 >ENSRNOG00000014921 hs-mir-103 1880 1887 AGCAGCAUUGUACAGGGCUAUGA&AAAAACUGUAUUUGCAUUCCCAGGCGGGUGGAUGGAUGCUGCC mir-103 SINFRUG00000134427 2000 nt UTR 2 hits 423 1197 -----1----1-----1 >SINFRUG00000134427 hs-mir-103 423 AGCAGCAUUGUACAGGGCUAUGA&GAAAUAAAUAGUUUAAAAGACAAUCAAUGUGCUGAAUGCUGCUU 23.61 >SINFRUG00000134427 hs-mir-103 1197 1204 AGCAGCAUUGUACAGGGCUAUGA&GAAAUAAAUAGUUUAAAAGACAAUCAAUGUGCUGAAUGCUGCUU 23.61

miRNA: mir-122a

Human predicted target: ENSG00000139514

Mouse predicted target: ENSMUSG00000041313

Rat predicted target: ENSRNOG00000000924

Fugu predicted target: SINFRUG00000142273

Hs Gene description: HIGH-AFFINITY CATIONIC AMINO ACID TRANSPORTER-1 (CAT-1) (CAT1) (SYSTEM Y+ BASIC AMINO ACID TRANSPORTER) (ECOTROPIC RETROVIRAL LEUKEMIA RECEPTOR HOMOLOG) (ERR) (ECOTROPIC RETROVIRUS RECEPTOR HOMOLOG). [Source:SWISSPROT;Acc:P30825] NM 003045

```
mir-122a ENSG00000139514 3866 nt UTR 2 hits 1091 1364
 >ENSG00000139514 hs-mir-122a 1091 1098
UGGAGUGUGACAAUGGUGUUUGU&GAAAUUGAAAUCAAUCCACAGUCCAUGAAAUUGUGACACUCCAC
25.80
>ENSG00000139514 hs-mir-122a
                1364
                    1371
UGGAGUGUGACAAUGGUGUUUGU&CUGGGUCGGGCCUGCGGCCAGCACCAUUUCACACACUCCU
mir-122a ENSMUSG00000041313 2358 nt UTR 1 hits 331
-----1----1
>ENSMUSG00000041313 hs-mir-122a
                  331
                      338
UGGAGUGUGACAAUGGUGUUUGU&CCCUCCCUGGGACCACCCUGGCAUCGCCCAUGUGCACACUCCAG
28.70
mir-122a ENSRNOG00000000924 2309 nt UTR 1 hits 325
 >ENSRNOG00000000924 hs-mir-122a 325 332
UGGAGUGUGACAAUGGUGUUUGU&CCUUCCCUGGGACCACCCUGCGUACACUCAUACGUACACUCCAG
26.50
mir-122a SINFRUG00000142273 2000 nt UTR 1 hits 935
```

```
>SINFRUG00000142273 hs-mir-122a
                        935
                            942
UGGAGUGUGACAAUGGUGUUUGU&CAUGGACACACUGACGGGAAAUGAGCACACACACACCCCC
miRNA: mir-124a
Human predicted target: ENSG0000070882
Mouse predicted target: ENSMUSG00000029822
Rat predicted target: ENSRNOG00000010011
Fugu predicted target: SINFRUG00000137005
Hs Gene description: OXYSTEROL BINDING PROTEIN-RELATED PROTEIN 3 (OSBP-
RELATED PROTEIN 3) (ORP-3). [Source:SWISSPROT; Acc: Q9H4L5] NM 145321
mir-124a ENSG0000070882
                    5643 nt UTR
                              3 hits 336 656 1053
 -----1----1
>ENSG00000070882 hs-mir-124a 336
                          343
UUAAGGCACGCGGUGAAUGCCA&UUUCCAAAGGUUAGGGAAGAUUCCAAUUAAAUUUAUGCCUUAU
>ENSG00000070882 hs-mir-124a 656 663
UUAAGGCACGCGGUGAAUGCCA&GAAGCAUUUGAACUUGUUCCUCCCUAUAGUUCUAUUGCCUUAU
>ENSG00000070882 hs-mir-124a 1053 1060
UUAAGGCACGCGGUGAAUGCCA&ACCAUAUUUUAGAUCUUGUAUAAAAAGUUGCCAUCUGCCUUAU
```

mir-124a ENSMUSG00000029822 2258 nt UTR 2 hits 336 1027
11
>ENSMUSG00000029822 hs-mir-124a 336 343
UUAAGGCACGCGGUGAAUGCCA&AAUUUUCCAGAGGUAAGGGGGAAAUUUCAAAUUUAUGCCUUAU
.((((((((((.&))))))))))))18.50
>ENSMUSG00000029822 hs-mir-124a 1027 1034
UUAAGGCACGCGGUGAAUGCCA&CGCCCUUUUGACCUUGUAUAGCCAGUUUGACCAUCUGCCUUAU
.(((((((((()))))))))))))))18.60
mir-124a ENSRNOG00000010011 2000 nt UTR 3 hits 342 641 1040
111
>ENSRNOG00000010011 hs-mir-124a 342 349
UUAAGGCACGCGGUGAAUGCCA&AAUUUUCCAAAGGUAAGGGGGAAAAUUCAGAUUUAUGCCUUAU
.((((((((((((()))))))))))))))
>ENSRNOG0000010011 hs-mir-124a 641 648
UUAAGGCACGCGGUGAAUGCCA&CAACCGGAAGAAGUCUUCUCUCCCUCGAGUUCUGUUGCCUUAU
.((((((((((((
>ENSRNOG0000010011 hs-mir-124a 1040 1047
UUAAGGCACGCGGUGAAUGCCA&CGUACUUUUGACCUUGUAUAGAGAGUUUGACCAUCUGCCUUAU
.(((((((((()).))))))))))17.80
mir-124a SINFRUG00000137005 2000 nt UTR 2 hits 118 379
11
>CINEDUC0000127005 bg mir 1245 110 125
>SINFRUG00000137005 hs-mir-124a 118 125

UUAAGGCACGCGGUGAAUGCCA&AAUGGACAUACUUUCAAUCCUGUUUAUUGCACUUUUGCCUUAAC
(((((((((((((((((((((((((((((((((((((((
>SINFRUG00000137005 hs-mir-124a 379 386
UUAAGGCACGCGGUGAAUGCCA&CUGUUUAAGUUCAUAUGUAUUCAGCACUUGCCCGAUGCCUUAC
.(((((((((((()))))))))))))))))))))
miRNA: mir-124a
Human predicted target: ENSG00000110422
Mouse predicted target: ENSMUSG0000027177
Rat predicted target: ENSRNOG0000011358
Fugu predicted target: SINFRUG00000121575
Fugu predicted target: SINFRUG00000133436
Hs Gene description: HOMEODOMAIN INTERACTING PROTEIN KINASE 3; HOMEODOMAIN-INTERACTING PROTEIN KINASE 3. [Source:RefSeq;Acc:NM_005734] NM_005734
mir-124a ENSG00000110422 2737 nt UTR 1 hits 550
11
>ENSG00000110422 hs-mir-124a 550 557
UUAAGGCACGCGGUGAAUGCCA&AUCUCAGCUGCAUUGUAAACCGUUCCUACACAUAGUGCCUUAAA
(((((((((((((((((((((((((((((((((((((((
mir-124a ENSMUSG00000027177 2090 nt UTR 1 hits 564
11
>FNSMISG0000027177 bs_mir_12/a 56/ 571
>ENSMUSG00000027177 hs-mir-124a 564 571

UUAAGGCACGCGGUGAAUGCCA&ACUCUCAGCUGCAUUGUAACCGUUCCCACACAUAGUGCCUUAAA
(((((((((((((((((((((((((((((((((((((((
mir-124a ENSRNOG00000011358 2072 nt UTR 1 hits 566
11
>ENSRNOG0000011358 hs-mir-124a 566 573
UUAAGGCACGCGGUGAAUGCCA&AUCUCAGCUGCAUUGUAAACCGUUCCCACACAUAGUGCCUUAAA
(((((((((((((((((((((((((((((((((((((((
mir-124a SINFRUG00000121575 2000 nt UTR 1 hits 698
1
>SINFRUG00000121575 hs-mir-124a 698 705
UUAAGGCACGCGGUGAAUGCCA&ACUCGCUGCAUUGUCUAACCUGUCCCCAACCAUAGUGCCUUAC
.((((((((((((((((((((((((((((((((((((((
mir-124a SINFRUG00000133436 2000 nt UTR 1 hits 564
11
>SINFRUG00000133436 hs-mir-124a 564 571
UUAAGGCACGCGGUGAAUGCCA&UUUGGGAGGCAGAACUCGUUACUGCUCCUCCUCAGUGCCUUAC
.((((((((((((((((((((((((((((((((((((((

miRNA: mir-124a

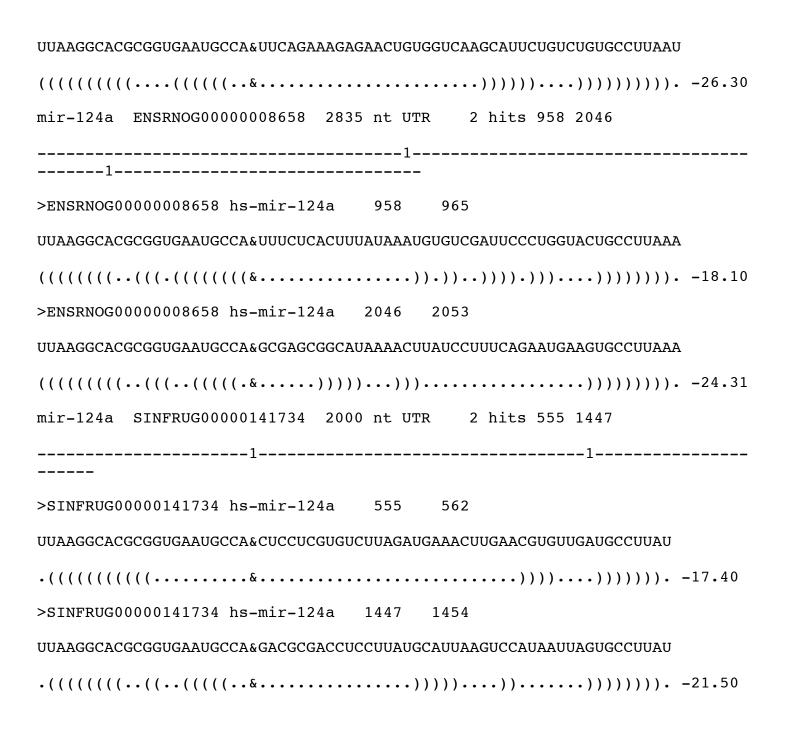
Human predicted target: ENSG00000163403

Mouse predicted target: ENSMUSG00000035158

Rat predicted target: ENSRNOG00000008651

Rat predicted target: ENSRNOG00000008658 Fugu predicted target: SINFRUG00000141734 HS Gene description: MICROPHTHALMIA-ASSOCIATED TRANSCRIPTION FACTOR. [Source:SWISSPROT; Acc: 075030] mir-124a ENSG00000163403 2000 nt UTR 2 hits 485 1585 >ENSG00000163403 hs-mir-124a 485 492 UUAAGGCACGCGGUGAAUGCCA&UUUUCCAUUUUAUAAAUGUAUUGAUUCAUUGGUACUGCCUUAAA >ENSG00000163403 hs-mir-124a 1585 1592 UUAAGGCACGCGGUGAAUGCCA&GCAAGUGGCAUAAAGCAUAUCCAUUCAGAAUGAAGUGCCUUAAA mir-124a ENSMUSG00000035158 2527 nt UTR 2 hits 548 1640 >ENSMUSG00000035158 hs-mir-124a 548 555 UUAAGGCACGCGGUGAAUGCCA&UUUCUCGCUUUCUAAAUGCGGCAAUUUCCUGGUACUGCCUUAAA >ENSMUSG00000035158 hs-mir-124a 1640 1647 UUAAGGCACGCGGUGAAUGCCA&CUGUGUGGCAUAAAGCAUACCCUUUCAGAAUGAAGUGCCUUAAA mir-124a ENSRNOG00000008651 2000 nt UTR 1 hits 469

>ENSRNOG00000008651 hs-mir-124a 469 476



miRNA: mir-125b

Human predicted target: ENSG00000068724

Mouse predicted target: ENSMUSG00000036918

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Rat predicted target: ENSRNOG00000014879
Fugu predicted target: SINFRUG00000131832
Fugu predicted target: SINFRUG00000141548
Hs Gene description: TETRATRICOPEPTIDE REPEAT PROTEIN 7 (TPR REPEAT
PROTEIN 7) (FRAGMENT). [Source:SWISSPROT; Acc:Q9ULT0]
mir-125b ENSG00000068724
                   3407 nt UTR
                             3 hits 97 1469 2785
-----1-----
>ENSG00000068724 hs-mir-125b
                     97 104
UCCCUGAGACCCUAACUUGUGA&UCAGGGUGGGGCAACAGUGGCAUCAGGUGCGGGCCUCAGGGAA
>ENSG00000068724 hs-mir-125b 1469 1476
UCCCUGAGACCCUAACUUGUGA&GAAAAGUAAAGAAAAAGCAAAUGCUGUUGGUUUAUCUCAGGGU
>ENSG00000068724 hs-mir-125b 2785 2792
UCCCUGAGACCCUAACUUGUGA&CGAAUGUUGGAGAGUCACGCAGCGGUGGAGACCUGCUCAGGGC
mir-125b ENSMUSG00000036918 3693 nt UTR 2 hits 106 488
>ENSMUSG00000036918 hs-mir-125b 106 113
UCCCUGAGACCCUAACUUGUGA&GGGGGCAGGGAAGGGCGUGUGUCCAGAUGUGGGGCCUCAGGGAA
>ENSMUSG00000036918 hs-mir-125b
                           495
                       488
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UCCCUGAGACCCUAACUUGUGA&UGCCGGAGAGCCCCGGAUACAUUUCCCCAUCCGAUCUCAGGGC

```
mir-125b ENSRNOG00000014879 2000 nt UTR 1 hits 73
>ENSRNOG0000014879 hs-mir-125b 73 80
UCCCUGAGACCCUAACUUGUGA&GGGGGCAGGGAAGGGCACCAUCCGGAUGUGGGGGCCUCAGGGAA
mir-125b SINFRUG00000131832 2000 nt UTR 1 hits 500
>SINFRUG00000131832 hs-mir-125b 500 507
UCCCUGAGACCCUAACUUGUGA&GCCGUGGGAGGAGAAAACACGGCUGGAUCGCGGUCCUCAGGGAC
mir-125b SINFRUG00000141548 2000 nt UTR 1 hits 1907
--1---
>SINFRUG00000141548 hs-mir-125b 1907 1914
UCCCUGAGACCCUAACUUGUGA&UGUCUGAACGGGAGGAGGAGUAUGUCCUGUUUCCUCAGGGC
```

miRNA: mir-128

Human predicted target: ENSG00000055070

Mouse predicted target: ENSMUSG00000040842

Rat predicted target: ENSRNOG00000009183

Fugu predicted target: SINFRUG00000123544

```
Fugu predicted target: SINFRUG00000124328
Hs Gene description: NM 015609
      ENSG00000055070
                  5002 nt UTR 4 hits 121 145 167 197
mir-128
>ENSG00000055070 hs-mir-128 121
                       128
UCACAGUGAACCGGUCUCUUUU&UGGACUUGAGCAGAGGGAACGACCUGACUUACUUGCACUGUGAU
>ENSG00000055070 hs-mir-128
                   145
                       152
UCACAGUGAACCGGUCUCUUUU&UGACUUACUUGCACUGUGAUCCCCCUUGCUCCGCCCACUGUGAC
>ENSG00000055070 hs-mir-128 167 174
UCACAGUGAACCGGUCUCUUUU&CCCUUGCUCCGCCCACUGUGACCUUGAACCCCAUGCACUGUGAC
>ENSG00000055070 hs-mir-128 197 204
UCACAGUGAACCGGUCUCUUUU&CCAUGCACUGUGACCUCCCCCUUCCCCCCUUCCCCACUGUGAU
mir-128 ENSMUSG00000040842 2000 nt UTR 4 hits 118 142 164 192
----1111------
>ENSMUSG00000040842 hs-mir-128 118 125
UCACAGUGAACCGGUCUCUUUU&UGGACUUGAGCAGAGGGAAUAACCUGACUUACUUGCACUGUGAU
>ENSMUSG00000040842 hs-mir-128 142 149
```

```
UCACAGUGAACCGGUCUCUUUU&UGACUUACUUGCACUGUGAUCCCCCUUGCUCCGCCCACUGUGAC
>ENSMUSG00000040842 hs-mir-128 164 171
UCACAGUGAACCGGUCUCUUUU&CCCUUGCUCCGCCCACUGUGACCUUGAACCCCAUGCACUGUGAC
>ENSMUSG00000040842 hs-mir-128 192 199
UCACAGUGAACCGGUCUCUUUU&CCCCAUGCACUGUGACCUCUGCCUCCCCCCUUCCCACUGUGAU
mir-128
     ENSRNOG00000009183 2530 nt UTR 8 hits 116 140 162 190 640
664 686 714
>ENSRNOG00000009183 hs-mir-128 116 123
UCACAGUGAACCGGUCUCUUUU&UGGACUUGAGCAGAGGGAAUAACCUGACUUACUUGCACUGUGAU
>ENSRNOG00000009183 hs-mir-128 140
                       147
UCACAGUGAACCGGUCUCUUUU&UGACUUACUUGCACUGUGAUCCCCCUUGCUCCGCCCACUGUGAC
>ENSRNOG00000009183 hs-mir-128 162
                       169
UCACAGUGAACCGGUCUCUUUU&CCCUUGCUCCGCCCACUGUGACCUUGAACCCCAUGCACUGUGAC
>ENSRNOG00000009183 hs-mir-128 190 197
UCACAGUGAACCGGUCUCUUUU&CCCCAUGCACUGUGACCUCUGCCUCCCCCCUUCCCACUGUGAU
>ENSRNOG00000009183 hs-mir-128 640 647
```

```
UCACAGUGAACCGGUCUCUUUU&UGGACUUGAGCAGAGGGAAUAACCUGACUUACUUGCACUGUGAU
>ENSRNOG00000009183 hs-mir-128 664 671
UCACAGUGAACCGGUCUCUUUU&UGACUUACUUGCACUGUGAUCCCCCUUGCUCCGCCCACUGUGAC
>ENSRNOG00000009183 hs-mir-128 686 693
UCACAGUGAACCGGUCUCUUUU&CCCUUGCUCCGCCCACUGUGACCUUGAACCCCAUGCACUGUGAC
>ENSRNOG00000009183 hs-mir-128 714 721
UCACAGUGAACCGGUCUCUUUU&CCCCAUGCACUGUGACCUCUGCCUCCCCCCUUCCCACUGUGAU
mir-128 SINFRUG00000123544 2000 nt UTR 2 hits 878 906
   >SINFRUG00000123544 hs-mir-128 878 885
UCACAGUGAACCGGUCUUUUU&CGCGCUCUUCUCUUAUACCACCCCGAGUCGGUUGACACUGUGAU
>SINFRUG00000123544 hs-mir-128 906 913
UCACAGUGAACCGGUCUCUUUU&CGGUUGACACUGUGAUCGUGGACGUCUUCUGCUCUCACUGUGAC
SINFRUG00000124328 2000 nt UTR 1 hits 313
mir-128
>SINFRUG00000124328 hs-mir-128 313 320
```

UCACAGUGAACCGGUCUCUUUU&CCGCUGCGAACGGGCCUUCAGCUCACAUCCCUCUACACUGUGAU

```
miRNA: mir-128
Human predicted target: ENSG00000070444
Mouse predicted target: ENSMUSG00000000282
Rat predicted target: ENSRNOG00000002894
Fugu predicted target: SINFRUG00000136074
Hs Gene description: MAX BINDING PROTEIN MNT (ROX PROTEIN) (MYC ANTAGONIST
MNT). [Source:SWISSPROT;Acc:Q99583]
                      NM 020310
mir-128
     ENSG00000070444
              4136 nt UTR
                         2 hits 614 2563
>ENSG00000070444 hs-mir-128
                 614
                     621
UCACAGUGAACCGGUCUCUUUU&GGCCUCAGCCUGGGGCUCUCUGACCCGGUUGCAGUCACUGUGAU
>ENSG00000070444 hs-mir-128
                 2563
                     2570
UCACAGUGAACCGGUCUCUUUU&CCAGAGGUGGCCCUUGUUUACAGUGAGGACUCGGCCACUGUGU
mir-128
     ENSMUSG0000000282 4381 nt UTR 4 hits 321 589 780 2119
.-----1----1----
 .____
>ENSMUSG00000000282 hs-mir-128 321
                       328
UCACAGUGAACCGGUCUCUUUU&CGCUCCAUCUCCCUGUUUUUGUCCCCUGGAAGUCUGCACUGUGGC
```

```
>ENSMUSG00000000282 hs-mir-128 589 596
UCACAGUGAACCGGUCUCUUUU&GGCCUGGGCCUGGGCCACUCUGACCCACCUGUGGUCACUGUGAU
>ENSMUSG0000000282 hs-mir-128 780 787
UCACAGUGAACCGGUCUCUUUU&GGUGUGGACCAGCAAGGGCUCUAGGAGCUAAGGUACACUGUGGA
>ENSMUSG00000000282 hs-mir-128 2119 2126
UCACAGUGAACCGGUCUCUUUU&AAAGAGGUGGCCCUUGUUUACAGUGAGGACUUGGUCACUGUGU
ENSRNOG00000002894 4278 nt UTR 2 hits 330 2015
 -----1----1-----
>ENSRNOG00000002894 hs-mir-128 330
                       337
UCACAGUGAACCGGUCUCUUUU&ACCUCCCUGCUUUGUCCCCCCCCCAGGAAGUCUGCACUGUGGC
>ENSRNOG00000002894 hs-mir-128 2015
                      2022
UCACAGUGAACCGGUCUCUUUU&AAAGAGGUGGCCCUUGUUUACAGUGAGGACUUGGUCACUGUGU
SINFRUG00000136074 2000 nt UTR 1 hits 1106
mir-128
  -----1------1
>SINFRUG00000136074 hs-mir-128 1106 1113
UCACAGUGAACCGGUCUCUUUU&AUGUGUUUUAUUCAGUACUAUUUUAGGCCAGGCAGCACUGUGAA
```

miRNA: mir-131 Human predicted target: ENSG00000015153 Mouse predicted target: ENSMUSG00000022634 Rat predicted target: ENSRNOG0000004773 Rat predicted target: ENSRNOG0000005254 Fugu predicted target: SINFRUG00000122248 Fugu predicted target: SINFRUG00000152392 Hs Gene description: YY1 ASSOCIATED FACTOR 2. [Source:RefSeq; Acc: NM 005748] NM 005748 mir-131 ENSG00000015153 3555 nt UTR 1 hits 703 -----1 >ENSG00000015153 hs-mir-131 703 710 UAAAGCUAGAUAACCGAAAGU&CUAGCGGACUAGUAAACAAUAAAACAUUGAUUAUUUAGCUUUAU mir-131 ENSMUSG00000022634 3109 nt UTR 1 hits 691 ------>ENSMUSG00000022634 hs-mir-131 691 698 UAAAGCUAGAUAACCGAAAGU&ACUGUUCACUAGUAGACAGUACGACGUGGCUUGUUUAGCUUUC mir-131 ENSRNOG00000004773 2000 nt UTR 1 hits 697

```
>ENSRNOG0000004773 hs-mir-131 697 704
UAAAGCUAGAUAACCGAAAGU&CUAGCUGAAUAGUAAACAAUAAAACACGGACUGUGUAGCUUUC
mir-131 ENSRNOG00000005254 3403 nt UTR 2 hits 652 1683
-----1----1-----1
>ENSRNOG00000005254 hs-mir-131 652 659
UAAAGCUAGAUAACCGAAAGU&UUUCAAAGCCUCGGUUUGUUGUACUGUUUACUAGGUAGCUUUC
>ENSRNOG00000005254 hs-mir-131 1683
UAAAGCUAGAUAACCGAAAGU&CUAGCUGAAUAGUAAACAAUAAAAACACGGACUGUGUAGCUUUC
mir-131
     SINFRUG00000122248 2000 nt UTR 1 hits 1409
 _____1___1____1
>SINFRUG00000122248 hs-mir-131 1409
                       1416
UAAAGCUAGAUAACCGAAAGU&UGAUUACCAUAUGUGAUGUUACCCCGCUGCUUCAUUAGCUUUU
mir-131
     SINFRUG00000152392 2000 nt UTR 1 hits 1911
--1---
>SINFRUG00000152392 hs-mir-131 1911 1918
UAAAGCUAGAUAACCGAAAGU&GACGUCGGGAGAAUAGCUGCUCAGAAACUUGCGGCUAGCUUUU
```

miRNA: mir-131 Human predicted target: ENSG00000120549 Mouse predicted target: ENSMUSG00000036617 Rat predicted target: ENSRNOG00000008666 Fugu predicted target: SINFRUG00000139197 mir-131 ENSG00000120549 3350 nt UTR 1 hits 460 >ENSG00000120549 hs-mir-131 460 467 mir-131 ENSMUSG00000036617 3314 nt UTR 1 hits 466 >ENSMUSG00000036617 hs-mir-131 466 473 mir-131 ENSRNOG00000008666 3304 nt UTR 1 hits 459 _____1___1____1____ >ENSRNOG00000008666 hs-mir-131 459 466 mir-131 SINFRUG00000139197 2000 nt UTR 2 hits 88 1521

>SINFRUG00000139197 hs-mir-131 88 95
UAAAGCUAGAUAACCGAAAGU&GCAGUGUGAAUAAUCAGUUUCAGCGGCGCAGGAAGUAGCUUUAC
(((((((((((((())))))))
>SINFRUG00000139197 hs-mir-131 1521 1528
UAAAGCUAGAUAACCGAAAGU&UGCAUGGUCUUGUAUAAUAUUUCACCAACAUCUGGUAGCUUUU
.((((((((((&)))))))))11.10
miRNA: mir-135b
Human predicted target: ENSG0000053254
Mouse predicted target: ENSMUSG0000033713
Rat predicted target: ENSRNOG0000004709
Fugu predicted target: SINFRUG00000137365
Hs Gene description: CHECKPOINT SUPPRESSOR 1 (FORKHEAD BOX PROTEIN N3). [Source:SWISSPROT; Acc:000409] NM_005197
mir-135b ENSG00000053254 3029 nt UTR 3 hits 211 780 2620
1
>ENSG00000053254 hs-mir-135b 211 218
UAUGGCUUUUUAUUCCUAUGUGAU&UGGACCCUUAAGAAUUUUAUUUU
(((((((((((((
>ENSG00000053254 hs-mir-135b 780 787
UAUGGCUUUUUAUUCCUAUGUGAU&AUUCUGUUCUCUAUUAAAUUAA
(((((((((((

```
>ENSG00000053254 hs-mir-135b
                  2620
                      2627
UAUGGCUUUUUAUUCCUAUGUGAU&GUUCCCUCCGUCUCCCCAGACAUCUGACACCCUAAAAGCCAUC
16.50
mir-135b ENSMUSG00000033713 2310 nt UTR 2 hits 236 798
 -----1----1-----
>ENSMUSG00000033713 hs-mir-135b
                    236
                        243
UAUGGCUUUUUAUUCCUAUGUGAU&GGACCCUUAAAAUUUUUUCUGUUUAAAGGAGAUUGAAGCCAUAG
22.00
>ENSMUSG00000033713 hs-mir-135b
                    798
                        805
UAUGGCUUUUUAUUCCUAUGUGAU&GAGUUCUGCUCUAUGUUAAAUUAAGAAGACUUCCAAAGCCAUAA
15,60
mir-135b ENSRNOG00000004709 3495 nt UTR 3 hits 217 720 1863
 >ENSRNOG00000004709 hs-mir-135b 217
                        224
UAUGGCUUUUUAUUCCUAUGUGAU&UGGACCCUUAAGAAUUUUCUGUUUAAAGGAGAUUGAAGCCAUAG
22.00
>ENSRNOG00000004709 hs-mir-135b
                    720
                        727
UAUGGCUUUUUAUUCCUAUGUGAU&GUUCUGCUCUAUGUUAAAUCAAGAAGACGUUCCAAAAGCCAUAA
17.70
```

>ENSRNOG00000004709 hs-mir-135b 1863 1870

UAUGGCUUUUUAUUCCUAUGUGAU&GUUCUGCUCUAUGUUAAAUCAAGAAGACGUUCCAAAAGCCAUAA 17.70 mir-135b SINFRUG00000137365 2000 nt UTR 1 hits 291 -----1----1----->SINFRUG00000137365 hs-mir-135b 291 298 UAUGGCUUUUUAUUCCUAUGUGAU&UGUCUUUGUUGUUUUUUGUUGUUUAAAAGGGGAUGAAAGCCAUAA 23.70 miRNA: mir-135b Human predicted target: ENSG00000145925 Mouse predicted target: ENSMUSG00000025867 Mouse predicted target: ENSMUSG00000033615 Rat predicted target: ENSRNOG0000000105 Fugu predicted target: SINFRUG00000121517 Fugu predicted target: SINFRUG00000145582 Hs Gene description: COMPLEXIN 2 (SYNAPHIN 1) (921-L). [Source:SWISSPROT; Acc:Q13329] NM 006651 mir-135b ENSG00000145925 2183 nt UTR 2 hits 1741 1927 -----1---->ENSG00000145925 hs-mir-135b 1741 1748

UAUGGCUUUUUAUUCCUAUGUGAU&AAUCCCACUGCAAUGGACCCAGGCAGCCCCAGGAAGCCAUGC

```
18.34
>ENSG00000145925 hs-mir-135b 1927
                      1934
UAUGGCUUUUUAUUCCUAUGUGAU&AGACAUGUGUCUUCUCUGUCCGUUUCCAAUAGGUAAAGCCAUAU
20.40
mir-135b ENSMUSG00000025867 2000 nt UTR
                          2 hits 1756 1941
---1--
>ENSMUSG00000025867 hs-mir-135b 1756 1763
UAUGGCUUUUUAUUCCUAUGUGAU&AAUGCUACUGGGACAGACCCAGGCAGUACCCUAGGAAGCCAUGC
20.71
>ENSMUSG00000025867 hs-mir-135b 1941
                        1948
UAUGGCUUUUUAUUCCUAUGUGAU&AGACAGACGUCUUCCCUGUCCGUUUCCAAUAGUUAAAGCCAUAU
17.70
mir-135b ENSMUSG00000033615 3569 nt UTR 2 hits 110 1246
            >ENSMUSG00000033615 hs-mir-135b
                    110
                        117
UAUGGCUUUUUAUUCCUAUGUGAU&GGGAGCAGAUGCAGCCCCCUACCCCGCAAAAAUAAGCCAUAG
16.36
>ENSMUSG00000033615 hs-mir-135b
                   1246 1253
UAUGGCUUUUUAUUCCUAUGUGAU&CAUUGACCUUCAUGACCUUACAUAGCUCUUUAGAGAAGCCAUAA
24.20
```

```
mir-135b ENSRNOG0000000105 2000 nt UTR 2 hits 1689 1875
>ENSRNOG0000000105 hs-mir-135b 1689 1696
UAUGGCUUUUUAUUCCUAUGUGAU&AAUGCUACUGGGACAGACCCAGGCAGUGCCCCAGGAAGCCAUGC
19.30
>ENSRNOG00000000105 hs-mir-135b 1875 1882
UAUGGCUUUUUAUUCCUAUGUGAU&AGACAGACGUCUUCCCUGUCCGUUUCCAAUAGUUAAAGCCAUAU
17.70
mir-135b SINFRUG00000121517 2000 nt UTR 2 hits 1493 1663
 ------1----1----1
>SINFRUG00000121517 hs-mir-135b 1493 1500
UAUGGCUUUUUAUUCCUAUGUGAU&GUUUUUUUAGCUCAGAUAGGACUUUUCACUAGACGAAGCCAUAU
23.43
>SINFRUG00000121517 hs-mir-135b 1663 1670
UAUGGCUUUUUAUUCCUAUGUGAU&GGCUGACGUAAACACAGAGAACACGUAUGUAGAAGAAGCCAUU
23.50
mir-135b SINFRUG00000145582 2000 nt UTR 1 hits 235
 -----1-----
>SINFRUG00000145582 hs-mir-135b 235 242
```

UAUGGCUUUUUAUUCCUAUGUGAU&ACGUGAAACGUGACAUAUAUCAAGAUACAGAGUAUAAGCCAUAU

```
miRNA: mir-135b
Human predicted target: ENSG00000158186
Mouse predicted target: ENSMUSG00000032470
Rat predicted target: ENSRNOG0000014060
Fugu predicted target: SINFRUG00000121799
HS Gene description: RAS-RELATED PROTEIN M-RAS (RAS-RELATED PROTEIN R-
RAS3). [Source:SWISSPROT;Acc:014807] NM 012219
mir-135b ENSG00000158186
                       2178 nt UTR 2 hits 365 1131
 -----1----1-----1
>ENSG00000158186 hs-mir-135b
                        365
                              372
UAUGGCUUUUUAUUCCUAUGUGAU&UGUGGAAGUGUUUAUCCACAUACAAAGUACAAACAAGCCAUGA
18.30
>ENSG00000158186 hs-mir-135b
                        1131
                             1138
UAUGGCUUUUUAUUCCUAUGUGAU&CAAUACUGUUAUCACUAAAACAGCACCAAGACCUGAAGCCAUC
.((((((((((.....)))))))......)))))).....
15.55
mir-135b ENSMUSG00000032470 2425 nt UTR 3 hits 313 1016 1857
 -----1----1
1-----
>ENSMUSG00000032470 hs-mir-135b
                           313
                                320
UAUGGCUUUUUAUUCCUAUGUGAU&UAUGGAAGUGCUUACCCACAUACAACGCACCAGACAAGCCAUGA
```

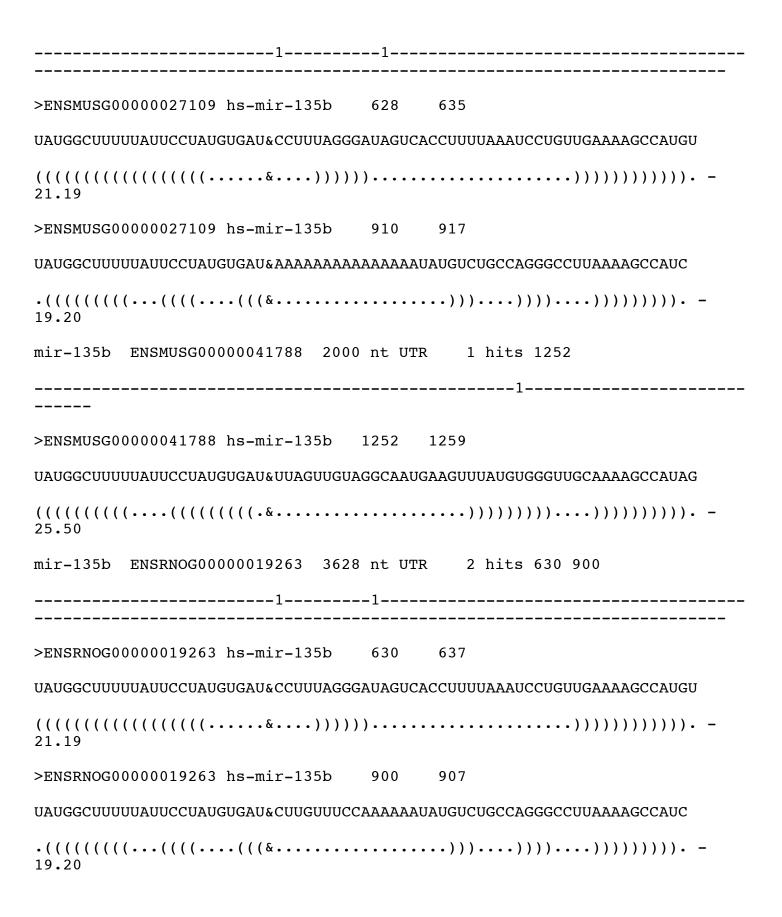
19.70

```
((((((((.....))))))))......)))))).....))))
17.20
>ENSMUSG00000032470 hs-mir-135b 1016 1023
UAUGGCUUUUUAUUCCUAUGUGAU&GCUCAAUACUAUUAUCUCAGAAGCCCCAGGACCUGAAGCCAUU
18.30
>ENSMUSG00000032470 hs-mir-135b 1857
                         1864
UAUGGCUUUUUAUUCCUAUGUGAU&AUGCUCUACACUCAGGGCAGCCACUGCCAGAGAAGCCAUGU
21.33
mir-135b ENSRNOG00000014060 2480 nt UTR 3 hits 318 1011 1814
>ENSRNOG00000014060 hs-mir-135b
                     318
                          325
UAUGGCUUUUUAUUCCUAUGUGAU&UGGAAGUGCUUUUAUCCACAUUCAACGCACCAGACAAGCCAUGA
16.50
>ENSRNOG00000014060 hs-mir-135b 1011
                         1018
UAUGGCUUUUUAUUCCUAUGUGAU&CCGAAGGCACUGCUGUCUGGGAAGCCCCAGGACUGAAGCCAUC
.((((((((...(((&.....))))))))))......)))))))....
18.04
>ENSRNOG00000014060 hs-mir-135b 1814
                         1821
UAUGGCUUUUUAUUCCUAUGUGAU&AUAGUCCACACUCAGGGCAGCCACUGCCAGAGAAGCCAUGU
21.33
mir-135b SINFRUG00000121799 2000 nt UTR 1 hits 1169
   .-----1------1
```

```
UAUGGCUUUUUAUUCCUAUGUGAU&UCUGGUGCCGUAGCCCUGGGACCCGGGGGCCCGAAGCCAUGU
20.40
miRNA: mir-135b
Human predicted target: ENSG00000172845
Mouse predicted target: ENSMUSG00000027109
Mouse predicted target: ENSMUSG00000041788
Rat predicted target: ENSRNOG00000019263
Fugu predicted target: SINFRUG00000140785
Hs Gene description: TRANSCRIPTION FACTOR SP3 (SPR-2) (FRAGMENT).
[Source:SWISSPROT; Acc:Q02447]
mir-135b ENSG00000172845
                     3411 nt UTR
                                2 hits 633 886
>ENSG00000172845 hs-mir-135b
                       633
                            640
UAUGGCUUUUUAUUCCUAUGUGAU&ACUCUAGGGAUAGUCACCUUUUAAAUCCUGUUGAAAAGCCAUGU
21.09
>ENSG00000172845 hs-mir-135b
                       886
                            893
UAUGGCUUUUUAUUCCUAUGUGAU&CUUGUUUCCAAAAACCAUGUCUCCCAGGGCCUUAAAAGCCAUC
19.70
mir-135b ENSMUSG00000027109 3632 nt UTR 2 hits 628 910
```

1176

>SINFRUG00000121799 hs-mir-135b 1169



mir-135b S	SINFRUG00000140785 2000 nt UTR 1 hits 1182	
	1	
>SINFRUG000	00140785 hs-mir-135b 1182 1189	
UAUGGCUUUUU	IAUUCCUAUGUGAU&ACAUGUAUGUUAUCUUAUUUUCACAUUGUUCAUAGAAGCCAUU	
.(((((((. 21.94	(((((((.&)))))))))))))	-
miRNA: mir-	135b	
Human predi	cted target: ENSG00000173153	
Mouse predi	cted target: ENSMUSG0000024955	
Rat predict	ed target: ENSRNOG0000021139	
Fugu predic	ted target: SINFRUG0000131162	
RECEPTOR, A	cription: STEROID HORMONE RECEPTOR ERR1 (ESTROGEN-RELATED LPHA) (ERR-ALPHA) (ESTROGEN RECEPTOR-LIKE 1). SSPROT; Acc: P11474] NM_004451	
mir-135b E	NSG00000173153 2779 nt UTR 2 hits 228 267	
11		
>ENSG000001	73153 hs-mir-135b 228 235	
UAUGGCUUUUU	AUUCCUAUGUGAU&UGUGUCCAGGCUCUGGGCACAGUGCUGCCCCUUGCAAGCCAUAA	
(((((((16.45	(((((&)))))))))))	-
>ENSG000001	73153 hs-mir-135b 267 274	
UAUGGCUUUUU	IAUUCCUAUGUGAU&CAUAACGUGCCCCCAGAGUGUAGGGGGCCUUGCGGAAGCCAUAG	
((((((((.(((((()))))))))))))	-

```
mir-135b ENSMUSG00000024955 2773 nt UTR 2 hits 237 278
>ENSMUSG00000024955 hs-mir-135b 237
                         244
UAUGGCUUUUUAUUCCUAUGUGAU&GAAUGCCCAGGUGUGGGCACAGUGCUGCCCCUUGCAAGCCAUAA
16.46
>ENSMUSG00000024955 hs-mir-135b
                    278
                         285
UAUGGCUUUUUAUUCCUAUGUGAU&UAACGUGCCCCCAAGAGUGUUGGGGGCCUCGCGGAAGCCAUAG
19.30
mir-135b ENSRNOG00000021139 2765 nt UTR 4 hits 226 269 935 978
 -----11------
>ENSRNOG00000021139 hs-mir-135b
                    226
                         233
UAUGGCUUUUUAUUCCUAUGUGAU&GAAUGCCCAGGUGUGGGCACAGUGCUGCCCCUUGCAAGCCAUAA
16.46
>ENSRNOG00000021139 hs-mir-135b
                    269
                         276
UAUGGCUUUUUAUUCCUAUGUGAU&ACGUGCCCCCUCCCAGAGUGUCGGGGGCCUUGCGGAAGCCAUAG
19.40
>ENSRNOG00000021139 hs-mir-135b
                    935
                         942
UAUGGCUUUUUAUUCCUAUGUGAU&GAAUGCCCAGGUGUGGGCACAGUGCUGCCCCUUGCAAGCCAUAA
16.46
>ENSRNOG00000021139 hs-mir-135b 978
                         985
```

UAUGGCUUUUUAUUCCUAUGUGAU&ACGUGCCCCCUCCCAGAGUGUCGGGGGCCUUGCGGAAGCCAUAG
((((((((((((((((&)))))))))))))
mir-135b SINFRUG00000131162 2000 nt UTR 3 hits 484 1117 1456
111
>SINFRUG00000131162 hs-mir-135b 484 491
UAUGGCUUUUUAUUCCUAUGUGAU&GCUGAACGUGGACCGGGAGGAGUUUGUUAUGCUAAAAGCCAUC
·(((((((((((((((((((((((((((((((((((((
>SINFRUG00000131162 hs-mir-135b 1117 1124
UAUGGCUUUUUAUUCCUAUGUGAU&CGUACCCAUGCACAAACUCUUCCUGGAGAUGCUGGAAGCCAUGA
((((((((((((((((((((((((((((((((((((((
>SINFRUG00000131162 hs-mir-135b 1456 1463
UAUGGCUUUUUAUUCCUAUGUGAU&AAAUAAACAUAAACAAUGGAACAUGUAACUCCUGAAAGCCAUAG
((((((((((((())))))))))))))))))))))

Human predicted target: ENSG00000142178

Mouse predicted target: ENSMUSG00000024042

Rat predicted target: ENSRNOG0000001189

Fugu predicted target: SINFRUG00000135301

Hs Gene description: PROBABLE SERINE/THREONINE PROTEIN KINASE SNF1LK (EC 2.7.1.-). [Source:SWISSPROT; Acc:P57059] NM_173354

```
mir-137 ENSG00000142178 4227 nt UTR 2 hits 104 1894
____1_________
>ENSG00000142178 hs-mir-137 104
                      111
UAUUGCUUAAGAAUACGCGUAG&UGGCCUCAAAGCCAAGAACUUUCUAGAAGCGAAAUAAGCAAUAC
>ENSG00000142178 hs-mir-137 1894 1901
UAUUGCUUAAGAAUACGCGUAG&AAAGGCCUCAGAAACCAUUGUGUGUUUCCUCUUUGAAGCAAUGA
mir-137
     ENSMUSG00000024042 3967 nt UTR 2 hits 77 147
>ENSMUSG00000024042 hs-mir-137 77 84
UAUUGCUUAAGAAUACGCGUAG&CCACCCCCCCAACCGUGGCCGAUUGACUCUUCCAAGCAAUAA
>ENSMUSG00000024042 hs-mir-137 147 154
UAUUGCUUAAGAAUACGCGUAG&GGACUCAAAAGCCAAGAACUUUCUAGACGUGAAACAAGCAAUAC
(((((((((....(((&.....))))...))))...)))))
mir-137
     ENSRNOG0000001189 3642 nt UTR 2 hits 54 123
>ENSRNOG0000001189 hs-mir-137 54 61
>ENSRNOG0000001189 hs-mir-137 123 130
```

UAUUGCUUAAGAAUACGCGUAG&GGACUCAAAAGCCAAGAACUUUCUAGACGUGAAACAAGCAAUAU SINFRUG00000135301 2000 nt UTR 2 hits 800 843 mir-137 >SINFRUG00000135301 hs-mir-137 800 807 UAUUGCUUAAGAAUACGCGUAG&ACUGGUGUGUUAUCUUCUGUUAUAAGCUAAAUACCAAGCAAUAA >SINFRUG00000135301 hs-mir-137 843 850 UAUUGCUUAAGAAUACGCGUAG&ACCAAACUCUAGAAAAAGAGUCAGACAGACAGAAAAGCAAUAA miRNA: mir-137 Human predicted target: ENSG00000169764 Mouse predicted target: ENSMUSG0000001891 Rat predicted target: ENSRNOG00000008079 Fugu predicted target: SINFRUG00000128752 Hs Gene description: UTP--GLUCOSE-1-PHOSPHATE URIDYLYLTRANSFERASE 2 (EC 2.7.7.9) (UDP- GLUCOSE PYROPHOSPHORYLASE 2) (UDPGP 2) (UGPASE 2). [Source:SWISSPROT; Acc:Q16851] mir-137 ENSG00000169764 2335 nt UTR 2 hits 328 1677 -----1----1-----1-----1-----1------>ENSG00000169764 hs-mir-137 328 335

UAUUGCUUAAGAAUACGCGUAG&UUUGAAUUGCUUGUGAUUUCAAAAAUAAAGCAGUGAAGCAAUAC

```
>ENSG00000169764 hs-mir-137 1677 1684
UAUUGCUUAAGAAUACGCGUAG&UUGGUCACUGAAACAAAAAUUGAAUUCCUAAAUCCAAGCAAUC
mir-137 ENSMUSG0000001891 2878 nt UTR 2 hits 178 1645
>ENSMUSG0000001891 hs-mir-137 178 185
UAUUGCUUAAGAAUACGCGUAG&UGCAAUGAGCUUUUAGUCUAAGGAAAGCAUAGAUGAAGCAAUAC
>ENSMUSG0000001891 hs-mir-137 1645
UAUUGCUUAAGAAUACGCGUAG&UUGGUCAUUAAAACAAAAACUGAAUUCCUAAAUCCAAGCAAUC
mir-137 ENSRNOG00000008079 2000 nt UTR 2 hits 176 1543
-----1-----1-----1-----1
>ENSRNOG00000008079 hs-mir-137 176 183
UAUUGCUUAAGAAUACGCGUAG&UGCAAUGAGCUUUUAGUCUAAGGAAAGCCUAAACAAAGCAAUAC
>ENSRNOG00000008079 hs-mir-137 1543 1550
UAUUGCUUAAGAAUACGCGUAG&UUGGUCACUAAAACAAAAACUGAAUUUCUAAAUCCAAGCAAUC
mir-137 SINFRUG00000128752 2000 nt UTR 1 hits 1377
 ------1----1
```

>SINFRUG00000128752 hs-mir-137 1377 1384 UAUUGCUUAAGAAUACGCGUAG&UGGUUUCAGUGAGAAUACUUGAGACGUGGACCUGAAAGCAAUAA miRNA: mir-138 Human predicted target: ENSG00000114993 Mouse predicted target: ENSMUSG00000034930 Rat predicted target: ENSRNOG00000009022 Fugu predicted target: SINFRUG00000154952 Hs Gene description: RHOTEKIN. [Source:RefSeq;Acc:NM 033046] NM 033046 mir-138 ENSG00000114993 2381 nt UTR 2 hits 441 2363 .-----1----1 >ENSG00000114993 hs-mir-138 441 448 AGCUGGUGUUGUGAAUC&CUAGACCUGCCUCACAUCAUCCCUGGAGCAUAGUUCACCAGCUG >ENSG00000114993 hs-mir-138 2363 2370 AGCUGGUGUUGUGAAUC&AGUACAAUGUUGGGACCCUUUGCUGGGAUGUCAAACACCAGCA mir-138 ENSMUSG00000034930 2355 nt UTR 2 hits 1532 2069 -----1----->ENSMUSG00000034930 hs-mir-138 1532 1539

AGCUGGUGUUGUGAAUC&UGCUUCUACAGGGAAAGGGUGAGAGGUGGCUCUUUCACCAGCUC

```
>ENSMUSG00000034930 hs-mir-138 2069 2076
AGCUGGUGUUGUGAAUC&GUCUGGGAGAUGGUAGAUUCCAACUUCUGGAUUCACACCAGCG
.(((((((...((((&.....))))))))))))). -22.40
mir-138 ENSRNOG00000009022 2331 nt UTR 2 hits 1697 1960
 -----1-----
>ENSRNOG00000009022 hs-mir-138 1697 1704
AGCUGGUGUUGUGAAUC&GUCCCUAGACCUCCUGACCUGGUGUCAGGCAGACACACCAGCUA
>ENSRNOG00000009022 hs-mir-138 1960 1967
AGCUGGUGUUGUGAAUC&AUCUGGGAGAUGGUAGGCUCCAACUUCUGGAUUCACACCAGCG
.(((((((...((((&......)))))))))))). -22.40
mir-138
     SINFRUG00000154952 2000 nt UTR 2 hits 1136 1412
 -----1----1----1
>SINFRUG00000154952 hs-mir-138 1136
                        1143
AGCUGGUGUUGUGAAUC&GCCAGCGUGACGUCCGACAGCGACAGCCACUGCAGCACCAGCC
>SINFRUG00000154952 hs-mir-138 1412
                        1419
AGCUGGUGUUGUGAAUC&CAGACCACGCUGUCCUGCUCCAGCUCCAGCCACCUCCAGCUC
```

Human predicted target: ENSG0000034677 Mouse predicted target: ENSMUSG00000022280 Rat predicted target: ENSRNOG00000009658 Fugu predicted target: SINFRUG00000139353 Hs Gene description: RING FINGER PROTEIN 19 (DORFIN) (DOUBLE RING-FINGER PROTEIN) (P38 PROTEIN). [Source:SWISSPROT; Acc:Q9NV58] NM 015435 mir-140 ENSG00000034677 2000 nt UTR 1 hits 398 ------1----1 >ENSG00000034677 hs-mir-140 398 405 AGUGGUUUUACCCUAUGGUAG&GGCUUUAGGGAUAAGUGGUUAGUGAUAUUUUAUUGAAACCACUA mir-140 ENSMUSG00000022280 3435 nt UTR 1 hits 391 >ENSMUSG00000022280 hs-mir-140 391 398 AGUGGUUUUACCCUAUGGUAG&AGGCUUAGGGAUGAGUGGUUAGUGACAUUUUAUUGAAACCACUA mir-140 ENSRNOG00000009658 3003 nt UTR 1 hits 382 ------1----1----->ENSRNOG00000009658 hs-mir-140 382 389 AGUGGUUUUACCCUAUGGUAG&AGGCUUAGGGAUAAGUGGUUAGUGACAUUUUAUUGAAACCACUA mir-140 SINFRUG00000139353 2000 nt UTR 2 hits 550 631 ------

```
>SINFRUG00000139353 hs-mir-140 550
                            557
AGUGGUUUUACCCUAUGGUAG&CAUGUGAGAGGGGCGUGAAAUUGGUCUUUCUUUGCAAACCACA
>SINFRUG00000139353 hs-mir-140 631
                            638
AGUGGUUUUACCCUAUGGUAG&CGGGCAGAUGGUGCAGCCUCCUGUCUGUUUAAACAAAACCACUG
miRNA: mir-140
Human predicted target: ENSG00000126562
Mouse predicted target: ENSMUSG00000035112
Rat predicted target: ENSRNOG00000020476
Fugu predicted target: SINFRUG00000154207
Hs Gene description: PROTEIN KINASE, LYSINE DEFICIENT 4; PUTATIVE PROTEIN
KINASE WNK4. [Source:RefSeq; Acc:NM 032387]
mir-140
     ENSG00000126562 2112 nt UTR 2 hits 1072 1499
       -----1-----1-----1
>ENSG00000126562 hs-mir-140 1072 1079
AGUGGUUUUACCCUAUGGUAG&UCGUAACAACUGCGUCCCUGGAAGGUGAAGGGGGUAAACCACA
>ENSG00000126562 hs-mir-140 1499
                          1506
AGUGGUUUUACCCUAUGGUAG&UAGAAGGUGUAACCAUCUGGGGAGGUAGGUUCAGGAAACCACA
mir-140
      ENSMUSG00000035112 2022 nt UTR 2 hits 1061 1440
```

```
-----1-----1-----1
>ENSMUSG00000035112 hs-mir-140 1061 1068
AGUGGUUUUACCCUAUGGUAG&CCUUAAGAGUCGGGGCCCCUGGGAGGUGAAGGGGUAAACCACA
>ENSMUSG00000035112 hs-mir-140 1440 1447
AGUGGUUUUACCCUAUGGUAG&UAGAAGGUGUAACCAUCUGACGGAGUGGGUUCAGGAAACCACA
ENSRNOG00000020476 2000 nt UTR 2 hits 1154 1534
 -----1-----1-----1
>ENSRNOG00000020476 hs-mir-140 1154 1161
AGUGGUUUUACCCUAUGGUAG&CCCCUUAACAUUGGGCCCCUGGGAGGUGAAGAGGUAAACCACA
>ENSRNOG00000020476 hs-mir-140 1534 1541
AGUGGUUUUACCCUAUGGUAG&UAGAAGGUGUAACCAUCUGGCGGGGUGGGUUCAGGAAACCACA
mir-140
    SINFRUG00000154207 839 nt UTR 1 hits 368
-----1------
>SINFRUG00000154207 hs-mir-140 368
                       375
AGUGGUUUUACCCUAUGGUAG&AAAUGAUGAUUCAGGGUUGACUUCUGCCUGGAUUAAAACCACG
```

Human predicted target: ENSG00000143816 Mouse predicted target: ENSMUSG0000000126 Rat predicted target: ENSRNOG00000003066 Fugu predicted target: SINFRUG00000147642 Hs Gene description: WNT-14 PROTEIN PRECURSOR. [Source:SWISSPROT; Acc: 014904] NM 003395 mir-140 ENSG00000143816 2522 nt UTR 2 hits 912 1210 >ENSG00000143816 hs-mir-140 912 919 AGUGGUUUUACCCUAUGGUAG&GGCUGCCCCAACACCAGCACUGUCUUCAGAGACUCAAACCACUA >ENSG00000143816 hs-mir-140 1210 1217 AGUGGUUUUACCCUAUGGUAG&CUCCUAACCCUGCCUCUGAUCUGCUUAGUUGUUUGAAACCACUA ENSMUSG0000000126 2001 nt UTR 2 hits 575 835 mir-140 >ENSMUSG0000000126 hs-mir-140 575 582 AGUGGUUUUACCCUAUGGUAG&CAGCCUGAUGCCAGCACUGUCUUCUUCAGAGAGCCAAACCACUA >ENSMUSG00000000126 hs-mir-140 842 835 AGUGGUUUUACCCUAUGGUAG&UCAUCGUCCCCCCCUCCUUUGCUUGCUCAGUUUGAAACCACUA ENSRNOG00000003066 4058 nt UTR 2 hits 550 807 mir-140

.-----1----1-----1-----1 >ENSRNOG00000003066 hs-mir-140 550 557 AGUGGUUUUACCCUAUGGUAG&CAGCAGCCUGACGCCAGCACUGUCUUCAGAGAGCCAAACCACUA >ENSRNOG00000003066 hs-mir-140 807 814 AGUGGUUUUACCCUAUGGUAG&UUCAUACUCCCUCGUCUGCUUGCUCUAGUUUGAAACCACUA SINFRUG00000147642 2000 nt UTR 2 hits 565 833 >SINFRUG00000147642 hs-mir-140 565 572 >SINFRUG00000147642 hs-mir-140 833 840 AGUGGUUUUACCCUAUGGUAG&CAGCCUUGAACGAAGCAGAGUUCAGGGAAUGACUUAAACCACUA

miRNA: mir-142as

Human predicted target: ENSG00000104388

Mouse predicted target: ENSMUSG00000050754

Mouse predicted target: ENSMUSG00000047187

Rat predicted target: ENSRNOG00000005963

Fugu predicted target: SINFRUG00000143003

Hs Gene description: RAS-RELATED PROTEIN RAB-2A. [Source:SWISSPROT;Acc:P08886] NM_002865
mir-142as ENSG00000104388 2301 nt UTR 1 hits 289
11
>ENSG00000104388 hs-mir-142as 289 296
UGUAGUGUUUCCUACUUUAUGG&UCUUGUGCCCUUAACUACGAACUGAAUUGUAUUAAACACUACAA
(((((((((((((
mir-142as ENSMUSG0000050754 2000 nt UTR 1 hits 281
11
>ENSMUSG0000050754 hs-mir-142as 281 288
UGUAGUGUUUCCUACUUUAUGG&UCUUGUGCCAUUAACUACGAGCUGAAUUGUAUUAGACACUACAA
(((((((((((((((((((((((((((((((((((((((
mir-142as ENSMUSG0000047187 2162 nt UTR 2 hits 284 822
11

>ENSMUSG00000047187 hs-mir-142as 284 291
UGUAGUGUUUCCUACUUUAUGG&UCUUGUGCCCUUAACUACGAGCUGAAUUGUAUUAAACACUACAA
(((((((((((((
>ENSMUSG00000047187 hs-mir-142as 822 829
UGUAGUGUUUCCUACUUUAUGG&UGUAAUGAGUGGGACGGGCAGAAACAGAAACUCCAACACUACAC
(((((((((((((((((((((((((((((((((((((((
mir-142as ENSRNOG0000005963 3227 nt UTR 3 hits 288 824 2382
1111

>ENSRNOG0000005963 hs-mir-142as 288 295
UGUAGUGUUUCCUACUUUAUGG&CUUGUGCCCUUAACUACGAGCUGAAUUGUAUUAAAACACUACAA
((((((((((((()
>ENSRNOG0000005963 hs-mir-142as 824 831
UGUAGUGUUUCCUACUUUAUGG&GGUGUAAUGAGUGGGAAGGGCAGACACAAACUCCAACACUACGC
(((((((((((((((((((((((((((((((((((((((
>ENSRNOG0000005963 hs-mir-142as 2382 2389
UGUAGUGUUUCCUACUUUAUGG&ACUGAAUCUGUAGUGUUUCCAUUGUUCUGCUUGAGACACUACAC
(((((((((((((())))))))))))))
mir-142as SINFRUG00000143003 2000 nt UTR 1 hits 738
1
>SINFRUG00000143003 hs-mir-142as 738 745
UGUAGUGUUUCCUACUUUAUGG&CUGACUCUGUCCUUUUGUUGAUUUGCAUUCAAGGAACACUACAA
(((((((((((((
miRNA: mir-142as
Human predicted target: ENSG0000104866
Mouse predicted target: ENSMUSG0000051403
Rat predicted target: ENSRNOG0000017692
Fugu predicted target: SINFRUG00000123919
mir-142as ENSG00000104866 2718 nt UTR 1 hits 142
1

```
>ENSG00000104866 hs-mir-142as 142 149
mir-142as ENSMUSG00000051403 2494 nt UTR 2 hits 119 689
>ENSMUSG00000051403 hs-mir-142as 119 126
UGUAGUGUUUCCUACUUUAUGG&AGACCAGGCAGAGCAUCCCAAGCCUCGCCACAACAACAACACUACAG
>ENSMUSG00000051403 hs-mir-142as 689
                    696
UGUAGUGUUUCCUACUUUAUGG&AGACCAGGCAGAGCAUCCCAAGCCUCGCCACAACAACACUACAG
mir-142as ENSRNOG00000017692 2597 nt UTR 1 hits 1439
 ------1----1
>ENSRNOG00000017692 hs-mir-142as 1439 1446
UGUAGUGUUUCCUACUUUAUGG&GCACCCCCCUCUAUGAACCCACACCUCAGGAGCACACUACAG
mir-142as SINFRUG00000123919 2000 nt UTR 2 hits 187 1412
-----1----1----1
>SINFRUG00000123919 hs-mir-142as 187 194
>SINFRUG00000123919 hs-mir-142as 1412 1419
UGUAGUGUUUCCUACUUUAUGG&UGAAAAGAACUUUAUCAAGCUAUCUCUCCCAUCCACACUACAU
```

```
miRNA: mir-142s
Human predicted target: ENSG00000069849
Mouse predicted target: ENSMUSG00000032412
Rat predicted target: ENSRNOG00000011501
Fugu predicted target: SINFRUG00000151188
Fugu predicted target: SINFRUG00000151191
Hs Gene description: SODIUM/POTASSIUM-TRANSPORTING ATPASE BETA-3 CHAIN
(SODIUM/POTASSIUM- DEPENDENT ATPASE BETA-3 SUBUNIT) (ATPB-3).
[Source:SWISSPROT; Acc:P54709] NM 001679
mir-142s ENSG00000069849 2839 nt UTR 1 hits 335
 -----1----1
>ENSG00000069849 hs-mir-142s 335
                          342
CCCAUAAAGUAGAAAGCACUAC&UGUCUAAAGCUUAAUAUGCCGUGCUAUGUAAAUAUUUUAUGGA
mir-142s ENSMUSG00000032412 2000 nt UTR 1 hits 329
 .-----1----1
>ENSMUSG00000032412 hs-mir-142s 329
                            336
CCCAUAAAGUAGAAAGCACUAC&CGUCUAAAGCUUCAUGUGCUGGGCUGUGUACAUAUUUUAUGGA
mir-142s ENSRNOG00000011501 2836 nt UTR 1 hits 326
```

>ENSRNOG00000011501 hs-mir-142s 326 333 CCCAUAAAGUAGAAAGCACUAC&UGUCUAAAGCUUCAUGUGCUGUGUGUAAAUAUUUUAUGGA mir-142s SINFRUG00000151188 2000 nt UTR 1 hits 459 >SINFRUG00000151188 hs-mir-142s 459 466 CCCAUAAAGUAGAAAGCACUAC&CUUCCUGCUGUCAGGGGGAGAACGCUGUUCUCGUCUUUAUGGGA mir-142s SINFRUG00000151191 2000 nt UTR 1 hits 1299 -----1-----1 >SINFRUG00000151191 hs-mir-142s 1299 1306 CCCAUAAAGUAGAAAGCACUAC&CUUCCUGCUGUCAGGGGGAGAACGCUGUUCUCGUCUUUAUGGGA

miRNA: mir-145

Human predicted target: ENSG00000109189

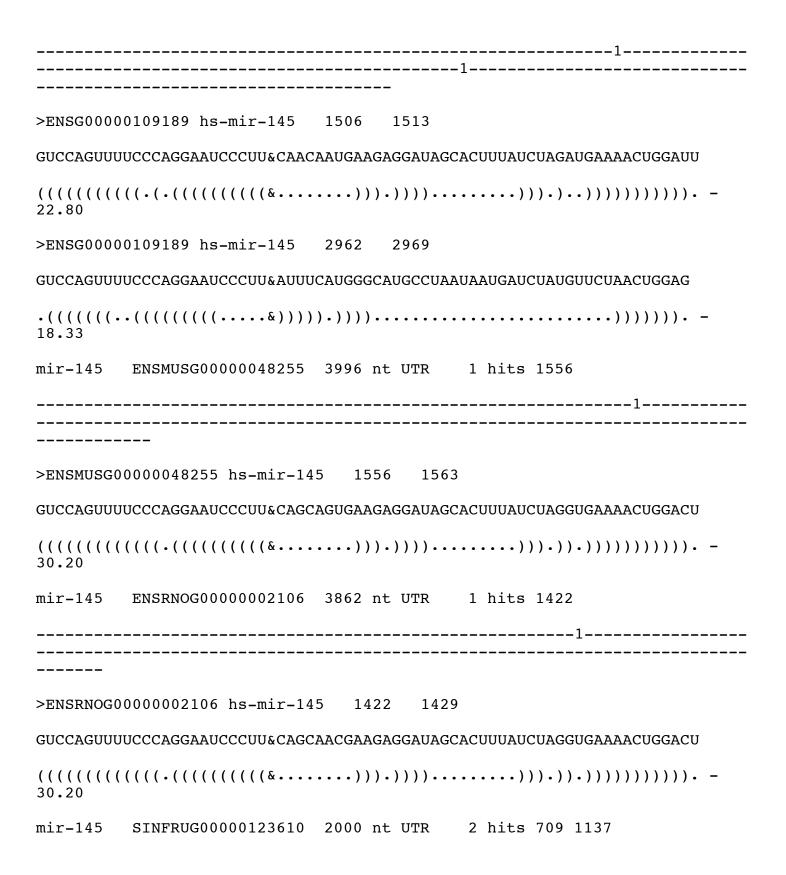
Mouse predicted target: ENSMUSG00000048255

Rat predicted target: ENSRNOG00000002106

Fugu predicted target: SINFRUG00000123610

Hs Gene description: NM 022832

mir-145 ENSG00000109189 4611 nt UTR 2 hits 1506 2962



```
>SINFRUG00000123610 hs-mir-145
                     709
                           716
GUCCAGUUUUCCCAGGAAUCCCUU&AAGCUGAAGAUGGGACACAAACAUGACUGCCCCAUAACUGGAA
19.60
>SINFRUG00000123610 hs-mir-145
                     1137
                          1144
GUCCAGUUUUCCCAGGAAUCCCUU&ACCUUUUUGGGUGAAGUUGUGAGGAACACGUGCCAAACUGGAG
22.80
miRNA: mir-145
Human predicted target: ENSG00000114993
Mouse predicted target: ENSMUSG00000034930
Rat predicted target: ENSRNOG00000009022
Fugu predicted target: SINFRUG00000154952
Hs Gene description: RHOTEKIN. [Source:RefSeq;Acc:NM 033046] NM 033046
      ENSG00000114993
mir-145
                   2381 nt UTR
                             1 hits 236
  >ENSG00000114993 hs-mir-145
                    236
                         243
GUCCAGUUUUCCCAGGAAUCCCUU&CUCGCUGGGACCUCCCUAAACCCUUCCUGGAAGAAAACUGGAA
33.01
mir-145
      ENSMUSG00000034930 2355 nt UTR 1 hits 235
```

```
>ENSMUSG00000034930 hs-mir-145 235
                          2.42
GUCCAGUUUUCCCAGGAAUCCCUU&CUGGCUAGGAUUCCCCUAAGCGCUUCCUGGGAGAAAACUGGAA
30.10
mir-145
      ENSRNOG00000009022 2331 nt UTR
                             2 hits 50 222
>ENSRNOG00000009022 hs-mir-145 50
                           57
GUCCAGUUUUCCCAGGAAUCCCUU&AAGAGGAUGGCCAAGAGAAAAUGACCCAAGGACAACUGGACU
25,45
>ENSRNOG00000009022 hs-mir-145
                      222
                          229
GUCCAGUUUUCCCAGGAAUCCCUU&CUAGGACCCCCCCCCAAGCGCUUCCUGGGAGAAAACUGGAA
30.20
      SINFRUG00000154952 2000 nt UTR 1 hits 1708
mir-145
>SINFRUG00000154952 hs-mir-145 1708 1715
GUCCAGUUUUCCCAGGAAUCCCUU&GUGGGACAGGUGUCAAGGAGGUCCCUCUGGAGUAAAACUGGAA
26.80
```

Human predicted target: ENSG00000151702

Mouse predicted target: ENSMUSG0000016087 Rat predicted target: ENSRNOG00000008904 Fugu predicted target: SINFRUG00000153677 Hs Gene description: FRIEND LEUKEMIA INTEGRATION 1 TRANSCRIPTION FACTOR (FLI-1 PROTO- ONCOGENE) (ERGB TRANSCRIPTION FACTOR). [Source:SWISSPROT; Acc:Q01543] NM 002017 mir-145 ENSG00000151702 3428 nt UTR 3 hits 100 485 525 >ENSG00000151702 hs-mir-145 100 107 GUCCAGUUUUCCCAGGAAUCCCUU&UCAACAGGACAUAUGUGGCCUUGAAGGGAAGACAAAACUGGAUG 22.60 >ENSG00000151702 hs-mir-145 485 492 GUCCAGUUUUCCCAGGAAUCCCUU&AUCUAAUUUUAGGAGGACCAAAUUCAGUGGAUGGCAACUGGAA 20.60 >ENSG00000151702 hs-mir-145 525 532 GUCCAGUUUUCCCAGGAAUCCCUU&GAACAUUGAUUGUAAGGCCAGUGAAGUUUUCACCCAACUGGAA 15.00 mir-145 ENSMUSG0000016087 2126 nt UTR 3 hits 97 503 544 _____ >ENSMUSG00000016087 hs-mir-145 97 104 GUCCAGUUUUCCCAGGAAUCCCUU&CUCUAAAAGGCACAGUAGCCUUGAAGAGAUAAGAAAACUGGAUG 20.80

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>ENSMUSG0000016087 hs-mir-145 503
                       510
GUCCAGUUUUCCCAGGAAUCCCUU&AUCUUAUCUUCGGAGGACUCAAUUCAGUGGAUGGCAACUGGAA
20.60
>ENSMUSG0000016087 hs-mir-145 544
                       551
GUCCAGUUUUCCCAGGAAUCCCUU&AACACUGGCUCUGAGGCCAGUGAAGUUUUUUGCCCAACUGGAA
16.20
mir-145
     ENSRNOG00000008904 2000 nt UTR 3 hits 102 536 576
>ENSRNOG00000008904 hs-mir-145 102
                       109
GUCCAGUUUUCCCAGGAAUCCCUU&CUCUAAAAGAUGCUGUAGCUUUGAAGAGAUAAGAAAACUGGAUG
19.90
>ENSRNOG00000008904 hs-mir-145 536
                       543
GUCCAGUUUUCCCAGGAAUCCCUU&AUCUUUUCUUAGGAGGACUUAAUUCAGCGGAUGGCAACUGGAA
20.60
>ENSRNOG00000008904 hs-mir-145 576
                       583
GUCCAGUUUUCCCAGGAAUCCCUU&GAACACCGGCUGGGAGGCUGGUGAAGUCCCUGCCCAACUGGAA
26.20
     SINFRUG00000153677 2000 nt UTR 3 hits 189 556 594
mir-145
>SINFRUG00000153677 hs-mir-145 189 196
```

```
GUCCAGUUUUCCCAGGAAUCCCUU&GAAGAUUUUUCUAUUGUUUUUAAGAAUCUAUGAACAACUGGAUG
>SINFRUG00000153677 hs-mir-145 556
                           563
16.00
>SINFRUG00000153677 hs-mir-145 594
                           601
GUCCAGUUUUCCCAGGAAUCCCUU&UGGAAUGUGCCAUUCAUGCUUUUGGUUAUCCUCCAAACUGGAA
.((((((((....((...&.......))...))))...))))))) -
miRNA: mir-153
Human predicted target: ENSG00000111114
Mouse predicted target: ENSMUSG00000041702
Rat predicted target: ENSRNOG00000008531
Fugu predicted target: SINFRUG00000125067
Hs Gene description: NM 018167
mir-153 ENSG00000011114 2000 nt UTR 1 hits 1760
>ENSG00000011114 hs-mir-153 1760 1767
UUGCAUAGUCACAAAAGUGA&UAAAAAACUAUGAAUCACUCACUCACUCGAAAACUAUGCAGG
ENSMUSG00000041702 2000 nt UTR 1 hits 1545
mir-153
```

```
>ENSMUSG00000041702 hs-mir-153 1545 1552
UUGCAUAGUCACAAAAGUGA&CACAUAGCUAGGAAUCACUUACACUCACUCUAAAACUAUGCAGG
ENSRNOG00000008531 2805 nt UTR 1 hits 1723
mir-153
>ENSRNOG00000008531 hs-mir-153 1723 1730
UUGCAUAGUCACAAAAGUGA&CAUUUAACUAGGAAUCACUUACACUCACUCUAAAACUAUGCAGG
mir-153
      SINFRUG00000125067 2000 nt UTR 1 hits 1910
__1__
>SINFRUG00000125067 hs-mir-153 1910 1917
UUGCAUAGUCACAAAAGUGA&UGGCCGGGCUUUUACUGGAGACGUGACUUUGGUGUCUAUGCAAG
```

Human predicted target: ENSG00000169946

Mouse predicted target: ENSMUSG00000022306

Rat predicted target: ENSRNOG0000004109

Fugu predicted target: SINFRUG00000124894

Hs Gene description: ZINC FINGER PROTEIN, MULTITYPE 2; FRIEND OF GATA2; TRANSCRIPTION FACTOR GATA4, MODULATOR OF; ZINC FINGER PROTEIN 409. [Source:RefSeq;Acc:NM 012082] NM 012082

```
mir-153 ENSG00000169946 2000 nt UTR 1 hits 957
 .-----1
>ENSG00000169946 hs-mir-153 957 964
UUGCAUAGUCACAAAAGUGA&UUCUGAUAGAAAUAAUUUCUCAACAAAUGUUGUUACUAUGCAU
mir-153 ENSMUSG00000022306 3019 nt UTR 1 hits 972
 _____1
>ENSMUSG00000022306 hs-mir-153 972
                    979
UUGCAUAGUCACAAAAGUGA&UUCUGAUAGAAAUAAUUUCUCAACAAAUGUUGUUACUAUGCAU
mir-153 ENSRNOG00000004109 2000 nt UTR 1 hits 973
 >ENSRNOG00000004109 hs-mir-153 973 980
UUGCAUAGUCACAAAAGUGA&UCUGAUAGAAAAUAAUUUCUCAACAAAUGUUGUUACUAUGCAU
mir-153
    SINFRUG00000124894 2000 nt UTR 1 hits 1007
 -----1------1
>SINFRUG00000124894 hs-mir-153 1007 1014
UUGCAUAGUCACAAAAGUGA&AUUAUGGGAGAAAAUGUUUCUUAAAAACGUUGUUGCUAUGCAU
```

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miRNA: mir-181a
Human predicted target: ENSG00000144677
Mouse predicted target: ENSMUSG00000038995
Rat predicted target: ENSRNOG00000011393
Fugu predicted target: SINFRUG00000130306
Hs Gene description: NUCLEAR LIM INTERACTOR-INTERACTING FACTOR 1 (NLI-
INTERACTING FACTOR 1) (NIF-LIKE PROTEIN) (YA22 PROTEIN) (HYA22).
[Source:SWISSPROT; Acc:O15194] NM 005808
mir-181a ENSG00000144677
                     5601 nt UTR
                                4 hits 120 406 1972 3469
----1------1------1
>ENSG00000144677 hs-mir-181a 120
                            127
AACAUUCAACGCUGUCGGUGAGU&GAAAGUGAGGAUACUCCGUGCUCCAGGCCACAGGGUGAAUGUG
>ENSG00000144677 hs-mir-181a
                       406
                            413
AACAUUCAACGCUGUCGGUGAGU&CUCAGAAUCUCUUUCCUACAGGAUGAAGUGCCUUUUGAAUGUUA
19.20
>ENSG00000144677 hs-mir-181a
                      1972
                           1979
AACAUUCAACGCUGUCGGUGAGU&GUAGUCAUUAAAUGAACCCACUGCCUUAAAUGUCUUGAAUGUUG
19.40
>ENSG00000144677 hs-mir-181a
                      3469
                           3476
AACAUUCAACGCUGUCGGUGAGU&GGUGUCUGGGUAGUCAUGGAUUUCUGCUGGACAUUUGAAUGUG
```

mir-181a ENSMUSG00000038995 5349 nt UTR 3 hits 115 432 3351
1
>ENSMUSG00000038995 hs-mir-181a 115 122
AACAUUCAACGCUGUCGGUGAGU&CAGCCCAGGAAGACUCCGUGCUCCGGGCCACAGGGUGAAUGUC
.((((((((((((((((((((((((((((((((((((((
>ENSMUSG00000038995 hs-mir-181a 432 439
AACAUUCAACGCUGUCGGUGAGU&UCAGAAUCUCUUUCCUACAGGAUGAAGUGCCUUUUUGAAUGUUA
((((((((((((((((((((((((((((((((((((((
>ENSMUSG00000038995 hs-mir-181a 3351 3358
AACAUUCAACGCUGUCGGUGAGU&GGUGUCUGGGGAGUUACAGUUUUCUGCUGGAUGUUUGAAUGUG
.((((((((((((((((((((((((((((((((((((((
mir-181a ENSRNOG00000011393 2000 nt UTR 2 hits 123 445
1
>ENSRNOG00000011393 hs-mir-181a 123 130
AACAUUCAACGCUGUCGGUGAGU&GAGCCUGGGAAGACUCCACGCUUUGGGCCACAAGGUGAAUGUC
.((((((((((((((((((((((((((((((((((((((
>ENSRNOG0000011393 hs-mir-181a 445 452
AACAUUCAACGCUGUCGGUGAGU&CAGAAUCUCUUUCCUACAAGAUGAAGUGCCUUUUUUGAAUGUUA
((((((((((((((((((((((((((((((((((((((
mir-181a SINFRUG00000130306 2000 nt UTR 2 hits 519 1606
11111

```
>SINFRUG00000130306 hs-mir-181a
                        519
                             526
AACAUUCAACGCUGUCGGUGAGU&UGUGACUCUUUUCUAACUGAAUGAAGUGCCUUGUGUGAAUGUUG
20.11
>SINFRUG00000130306 hs-mir-181a
                        1606
                             1613
AACAUUCAACGCUGUCGGUGAGU&UUUGUUUUUUUUUCCUAGAUAAUACUGAAACAACUUGAAUGUUG
((((((((....)))))))).....)))))).....)
19.10
miRNA: mir-181a
Human predicted target: ENSG00000164463
Mouse predicted target: ENSMUSG00000048249
Rat predicted target: ENSRNOG00000020769
Fugu predicted target: SINFRUG00000139862
Hs Gene description: ADULT RETINA PROTEIN. [Source:RefSeq; Acc:NM 153607]
   NM 153607
mir-181a ENSG00000164463
                     5222 nt UTR
                               3 hits 736 984 4518
             -----1----1
 >ENSG00000164463 hs-mir-181a
                      736
                           743
AACAUUCAACGCUGUCGGUGAGU&AAUGUUUUUUGUUCCAACUCUUUUUCAGAUUUUUUGAAUGUA
>ENSG00000164463 hs-mir-181a
                      984
                           991
AACAUUCAACGCUGUCGGUGAGU&UAAGUAAAGUUUUGCACAGCUUACAUGAUACUGUAUGAAUGUA
```

```
>ENSG00000164463 hs-mir-181a 4518
                      4525
mir-181a ENSMUSG00000048249 2000 nt UTR 2 hits 766 1016
 >ENSMUSG00000048249 hs-mir-181a
                    766
                        773
AACAUUCAACGCUGUCGGUGAGU&AUGUCUUUUUGUUCCAACUCUUUUUCAGAUUUUUUGAAUGUA
.(((((((...((....(((&.....))))).....))).....)))))))....)
>ENSMUSG00000048249 hs-mir-181a 1016 1023
AACAUUCAACGCUGUCGGUGAGU&UAAGUAAAGUUUUGCACAGCUUACAUGAUACUGUAUGAAUGUA
mir-181a ENSRNOG00000020769 3521 nt UTR 4 hits 779 1024 2120 2365
           -----1----1-----1
>ENSRNOG00000020769 hs-mir-181a 779
                        786
AACAUUCAACGCUGUCGGUGAGU&AAUGUCUUUUUGUUCCAACUCUUUUUCAGAUUUUUUGAAUGUA
.(((((((...((....(((&.....)))))....)))))....))))))....)
>ENSRNOG00000020769 hs-mir-181a 1024 1031
AACAUUCAACGCUGUCGGUGAGU&UAAGUAAAGUUUUGCACAGCUUACAUGAUACUGUAUGAAUGUA
>ENSRNOG00000020769 hs-mir-181a 2120 2127
AACAUUCAACGCUGUCGGUGAGU&AAUGUCUUUUUGUUCCAACUCUUUUUCAGAUUUUUUGAAUGUA
>ENSRNOG00000020769 hs-mir-181a 2365 2372
```

AACAUUCAACGCUGUCGGUGAGU&UAAGUAAAGUUUUGCACAGCUUACAUGAUACUGUAUGAAUGUA mir-181a SINFRUG00000139862 2000 nt UTR 3 hits 1290 1346 1618 >SINFRUG00000139862 hs-mir-181a 1290 1297 AACAUUCAACGCUGUCGGUGAGU&GAGAGAGCUCCCUCACAUUCAAGGUUGUUUGUUAGUGAAUGUG >SINFRUG00000139862 hs-mir-181a 1346 1353 AACAUUCAACGCUGUCGGUGAGU&UUGUGAGGUUUUGUUUCAGUUGUCUGAAGAUAUUCUGAAUGUA >SINFRUG00000139862 hs-mir-181a 1618 1625 AACAUUCAACGCUGUCGGUGAGU&AAGUAAGGUUUUGCACAGCUUACCUGACGCCGUAUUGAAUGUA Human predicted target: ENSG00000129244

miRNA: mir-184

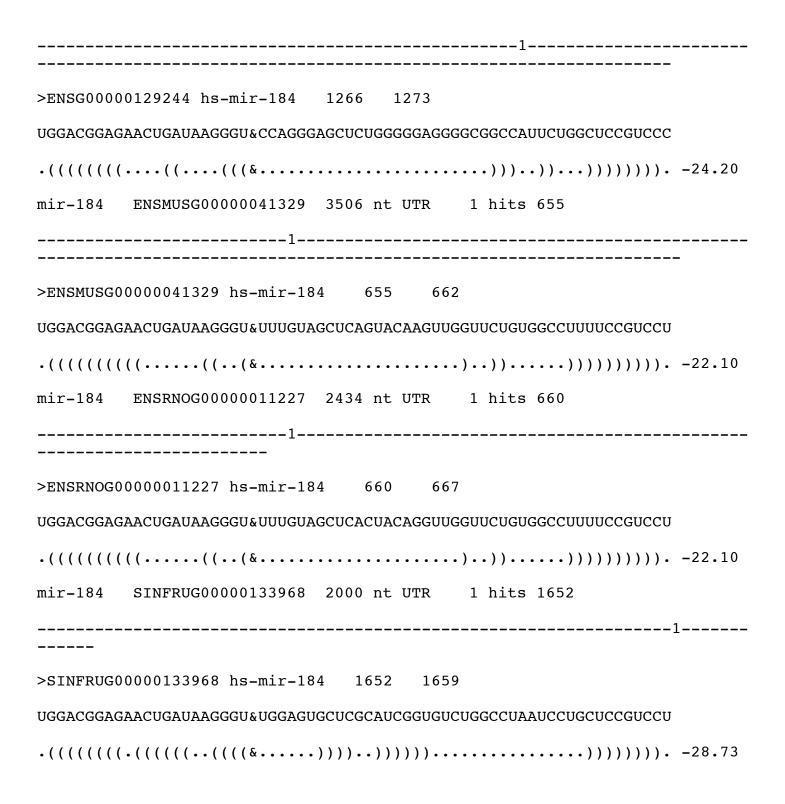
Mouse predicted target: ENSMUSG00000041329

Rat predicted target: ENSRNOG00000011227

Fugu predicted target: SINFRUG00000133968

Hs Gene description: SODIUM/POTASSIUM-TRANSPORTING ATPASE BETA-2 CHAIN (SODIUM/POTASSIUM- DEPENDENT ATPASE BETA-2 SUBUNIT). [Source:SWISSPROT; Acc:P14415] NM 001678

mir-184 ENSG00000129244 3485 nt UTR 1 hits 1266



miRNA: mir-190

```
Human predicted target: ENSG00000109046
Mouse predicted target: ENSMUSG0000017677
Rat predicted target: ENSRNOG00000012929
Fugu predicted target: SINFRUG00000137329
Hs Gene description: WD REPEAT AND SOCS BOX CONTAINING PROTEIN 1 (WSB-1)
(SOCS BOX- CONTAINING WD PROTEIN SWIP-1). [Source:SWISSPROT; Acc: Q9Y617]
   NM 134265
mir-190 ENSG00000109046 3264 nt UTR 2 hits 187 2260
_____1__1___1
>ENSG00000109046 hs-mir-190 187
                            194
UGAUAUGUUUGAUAUUUAGGU&AAAAUAUUAUUAUAGACAAUAGAAGUAUUUCUGAACAUAUCAA
>ENSG00000109046 hs-mir-190 2260 2267
UGAUAUGUUUGAUAUUAGGU&UUCAUAUCAUUGCAUUAUUUUUGCUUUCCACACCAACAUAUCC
mir-190
       ENSMUSG00000017677 2000 nt UTR 1 hits 191
>ENSMUSG00000017677 hs-mir-190 191 198
UGAUAUGUUUGAUAUUUAGGU&AAAGCAUUAUUUAUACACCAUAGAAAUAUUUCUGAACAUAUCAU
mir-190
       ENSRNOG00000012929 2767 nt UTR 1 hits 83
>ENSRNOG00000012929 hs-mir-190 83 90
```

UGAUAUGUUUGAUAUUUAGGU&GCAUUAUUUAUACACCAUUGGAGAAAUAUUUCUGAACAUAUCAU

```
SINFRUG00000137329 2000 nt UTR 1 hits 1209
mir-190
 ------1-----1
>SINFRUG00000137329 hs-mir-190 1209
                         1216
UGAUAUGUUUGAUAUAUUAGGU&CGUAUACGACGUGUAUAUAGUUUUAAUUUGUAUAAACAUAUCAC
miRNA: mir-194
Human predicted target: ENSG00000055609
Mouse predicted target: ENSMUSG00000028935
Rat predicted target: ENSRNOG00000007997
Fugu predicted target: SINFRUG00000148483
Hs Gene description: MYELOID/LYMPHOID OR MIXED-LINEAGE LEUKEMIA 3; ALR-
LIKE PROTEIN. [Source:RefSeq; Acc: NM 021230] NM 021230
mir-194
      ENSG00000055609 2248 nt UTR 2 hits 722 747
 -----11-------
>ENSG00000055609 hs-mir-194
                   722
                        729
UGUAACAGCAACUCCAUGUGGA&UUUUUAAAUAAAGUUAGAAGAAAGCCAAGCUGCUGCUGUUACC
>ENSG00000055609 hs-mir-194 747
                        754
UGUAACAGCAACUCCAUGUGGA&CAAGCUGCUGCUGUUACCUGCAGAACUAACAAACCCUGUUACU
```

```
mir-194 ENSMUSG00000028935 2001 nt UTR 2 hits 715 740
>ENSMUSG00000028935 hs-mir-194 715 722
UGUAACAGCAACUCCAUGUGGA&UUUUAAAUAAAAGUUAGAAGAAAGCCAAGCUGCUGCUGUUACC
>ENSMUSG00000028935 hs-mir-194 740 747
UGUAACAGCAACUCCAUGUGGA&CAAGCUGCUGUUACCUGCAGAACUAACAAACCCUGUUACU
.(((((((.....))))))))......))....)).....))
mir-194 ENSRNOG00000007997 2000 nt UTR 2 hits 717 742
-----11------
>ENSRNOG00000007997 hs-mir-194 717 724
UGUAACAGCAACUCCAUGUGGA&UUUUAAAUAAAAGUUAGAAGAAAGCCAAGCUGCUGCUGUUACC
>ENSRNOG00000007997 hs-mir-194 742
                         749
UGUAACAGCAACUCCAUGUGGA&CAAGCUGCUGCUGUUACCUGCAGAACUAACAAACCCUGUUACU
.(((((((......)))))))........))))......))
mir-194
     SINFRUG00000148483 727 nt UTR 1 hits 632
-----1----
>SINFRUG00000148483 hs-mir-194 632 639
UGUAACAGCAACUCCAUGUGGA&CGUUGCUAUUGUUUUUGGAGAUCGAGGAAGACAUGCUGUUACU
```

miRNA: mir-194 Human predicted target: ENSG00000123159 Mouse predicted target: ENSMUSG0000019433 Rat predicted target: ENSRNOG00000003864 Fugu predicted target: SINFRUG00000141873 Hs Gene description: RGS19-INTERACTING PROTEIN 1 (GAIP C-TERMINUS INTERACTING PROTEIN GIPC) (RGS-GAIP INTERACTING PROTEIN) (TAX INTERACTION PROTEIN 2) (TIP-2). [Source:SWISSPROT; Acc: 014908] NM 005716 mir-194 ENSG00000123159 2654 nt UTR 1 hits 481 >ENSG00000123159 hs-mir-194 481 488 UGUAACAGCAACUCCAUGUGGA&CACCCCUCCUGAGAGGAGCCCCCUCCCUGUGGAGCCUGUUACC mir-194 ENSMUSG00000019433 2521 nt UTR 2 hits 623 1014 >ENSMUSG00000019433 hs-mir-194 623 630 UGUAACAGCAACUCCAUGUGGA&AUCUCCCACCUGAGGGGAGCCCUCUCAGUUGGGGUCUGUUACC >ENSMUSG00000019433 hs-mir-194 1014 1021 UGUAACAGCAACUCCAUGUGGA&GAGAGCCCCCGUGUGUGGCCAGCAAGGCCUGUUGCCCUGUUACC mir-194 ENSRNOG00000003864 2391 nt UTR 2 hits 562 960

569

>ENSRNOG00000003864 hs-mir-194 562

UGUAACAGCAACUCCAUGUGGA&CUUCUCCCACCUGACAGGAGCUCCUCAGUUGGGUUCUGUUACC
.((((((((((((((((((((((((((((((((((((((
>ENSRNOG0000003864 hs-mir-194 960 967
UGUAACAGCAACUCCAUGUGGA&CACCUAACCCCUCUGUGGCAGCAAAGCCUGUUGCGCUGUUACAG
(((((((((((((((((((((((((((((((((((((((
mir-194 SINFRUG00000141873 2000 nt UTR 1 hits 267
1
>SINFRUG00000141873 hs-mir-194 267 274
UGUAACAGCAACUCCAUGUGGA&AGGUGGUUCCGGUGCGUGCCUGAACCUCCAUCUUGCUGUUACAG
(((((((((((((())))))))))))))))))))
miRNA: mir-194
Human predicted target: ENSG00000175220
Mouse predicted target: ENSMUSG0000027247
Rat predicted target: ENSRNOG0000016610
Fugu predicted target: SINFRUG00000138340
Hs Gene description: RHO-GTPASE-ACTIVATING PROTEIN 1 (GTPASE-ACTIVATING PROTEIN RHOOGAP) (RHO-RELATED SMALL GTPASE PROTEIN ACTIVATOR) (CDC42 GTPASE-ACTIVATING PROTEIN) (P50-RHOGAP). [Source:SWISSPROT;Acc:Q07960] NM_004308
mir-194 ENSG00000175220 3957 nt UTR 2 hits 165 866
1
>ENSG00000175220 hs-mir-194 165 172

```
UGUAACAGCAACUCCAUGUGGA&UCUGUCCAGCCCGCCUCACGGCCCUGGCGGCCUCGCUGUUACC
>ENSG00000175220 hs-mir-194 866
                   873
UGUAACAGCAACUCCAUGUGGA&GCAGAUCAUCAGCCUUCAUGUUCUUGUGGACCUGUCUGUUACGG
mir-194
     ENSMUSG00000027247 3426 nt UTR 1 hits 190
>ENSMUSG00000027247 hs-mir-194 190 197
UGUAACAGCAACUCCAUGUGGA&CUCUGCCCGUCCCACCUUACCGGCCCUGGAGGCCUCUGUUACC
mir-194 ENSRNOG00000016610 2000 nt UTR 1 hits 192
>ENSRNOG00000016610 hs-mir-194 192 199
UGUAACAGCAACUCCAUGUGGA&CCCUCUGUCCAUCCCACCUUACCGGCCCUGGAGGCCUGUUACC
mir-194 SINFRUG00000138340 2000 nt UTR 1 hits 833
  >SINFRUG00000138340 hs-mir-194 833
                     840
```

miRNA: mir-199a Human predicted target: ENSG00000116273 Mouse predicted target: ENSMUSG00000047777 Rat predicted target: ENSRNOG00000009046 Fugu predicted target: SINFRUG00000155548 Hs Gene description: NM 153812 4360 nt UTR 1 hits 1252 mir-199a ENSG00000116273 -----1----1 >ENSG00000116273 hs-mir-199a 1252 1259 CCCAGUGUUCAGACUACCUGUUC&UGGAAGAACUCUGCUCGAGGGCAGGGUGCCCUGGAACACUGGU mir-199a ENSMUSG00000047777 3921 nt UTR 2 hits 684 918 >ENSMUSG00000047777 hs-mir-199a 684 691 CCCAGUGUUCAGACUACCUGUUC&UCCCCACAAUACAGCCCAAAGUAUUUGCCACUGUUACACUGGGU 21.00 >ENSMUSG00000047777 hs-mir-199a 918 925 CCCAGUGUUCAGACUACCUGUUC&GCCUGGUCUGAGUGAGGGCUGGCUCAGCUCCUGGACACUGGU mir-199a ENSRNOG00000009046 3640 nt UTR 2 hits 821 2347 ------1----1

>ENSRNOG00000009046 hs-mir-199a 821 828 CCCAGUGUUCAGACUACCUGUUC&GUCCUGAUCUGGGUGAGGGCUGGCUCAGCUCCUGGACACUGGU >ENSRNOG00000009046 hs-mir-199a 2347 2354 CCCAGUGUUCAGACUACCUGUUC&GUCCUGAUCUGGGUGAGGGCUGGCUCAGCUCCUGGACACUGGU mir-199a SINFRUG00000155548 2000 nt UTR 1 hits 296 -----1----1 >SINFRUG00000155548 hs-mir-199a 296 303 CCCAGUGUUCAGACUACCUGUUC&GUAGCGGCUAACUGUUGGGACUCGGUGUCUUGUGAACACUGGA miRNA: mir-205 Human predicted target: ENSG00000134686 Mouse predicted target: ENSMUSG00000028796 Rat predicted target: ENSRNOG00000006004 Fugu predicted target: SINFRUG00000121521 Hs Gene description: POLYHOMEOTIC 2-LIKE; EARLY DEVELOPMENT REGULATOR 2-LIKE. [Source:RefSeq;Acc:NM 004427] NM 004427 mir-205 ENSG00000134686 3239 nt UTR 1 hits 1184 >ENSG00000134686 hs-mir-205 1184 1191

- HINDOUGUUTS-WII-205 1104 1171

UCCUUCAUUCCACCGGAGUCUG&CUAUUCCCCACCCCACACCCCAGGCAGGGUUGGAAAUGAAGGAC

```
mir-205
    ENSMUSG00000028796 3220 nt UTR 1 hits 1164
 -----1-----1
>ENSMUSG00000028796 hs-mir-205 1164 1171
UCCUUCAUUCCACCGGAGUCUG&UAACCCCUUCCCCAUACCUCCAGGCAGGGUUGGAAAUGAAGGAC
ENSRNOG00000006004 3046 nt UTR 3 hits 993 1365 1960
mir-205
 -----1----1
>ENSRNOG00000006004 hs-mir-205 993 1000
UCCUUCAUUCCACCGGAGUCUG&UGCCCUUUUCCCCAUACCUCCAGGCAGGGUUGGAAAUGAAGGAC
>ENSRNOG000000006004 hs-mir-205 1365
                  1372
UCCUUCAUUCCACCGGAGUCUG&UGCCCUUUUCCCCAUACCUCCAGGCAGGGUUGGAAAUGAAGGAC
>ENSRNOG00000006004 hs-mir-205 1960
                  1967
UCCUUCAUUCCACCGGAGUCUG&CAGCUGCUAGCUGGGAUUGGCUGGCUCGUGUAUGAAGGU
mir-205 SINFRUG00000121521 2000 nt UTR 1 hits 310
>SINFRUG00000121521 hs-mir-205 310 317
```

miRNA: mir-214 Human predicted target: ENSG00000140332 Mouse predicted target: ENSMUSG00000032280 Rat predicted target: ENSRNOG0000013013 Fugu predicted target: SINFRUG00000141146 Hs Gene description: TRANSDUCIN-LIKE ENHANCER PROTEIN 3 (ESG3). [Source:SWISSPROT; Acc:Q04726] NM 005078 mir-214 ENSG00000140332 3822 nt UTR 4 hits 529 694 2661 3398 -----1----1 >ENSG00000140332 hs-mir-214 529 536 ACAGCAGGCACAGACAGGCAG&CCCCUUCCCACCGGAAACUCUGAGUGUGUAUUUCGCCUGCUGUA >ENSG00000140332 hs-mir-214 694 701 ACAGCAGGCACAGACAGGCAG&AGUGUGGAAAAGGCAACCAGGUUGGCCGUAAGGUGCCUGCUGG >ENSG00000140332 hs-mir-214 2661 2668 ACAGCAGGCACAGACAGGCAG&UAUUUUGUCAAAGUCAUUCUCAGCACAAACAAUUGCCUGCUGUC >ENSG00000140332 hs-mir-214 3398 3405 ACAGCAGGCACAGACAGGCAG&GCACUGAGCCUCUCUGCACGUGCUUCCUCCUUCCUCCUGCUGC mir-214 ENSMUSG00000032280 3765 nt UTR 3 hits 490 1368 2613

```
.-----1----1-----1
 >ENSMUSG00000032280 hs-mir-214 490 497
ACAGCAGGCACAGACAGGCAG&GAACCCCAUCCCACCAUUGCUCGCCGUGGAUUUUGCCUGCUGUA
>ENSMUSG00000032280 hs-mir-214 1368 1375
ACAGCAGGCACAGACAGCAG&UGUUUUAUUAAAGAAAAGCUAAAGACCGUGUGAGCCCUGCUGG
>ENSMUSG00000032280 hs-mir-214 2613
                     2620
ACAGCAGGCACAGACAGGCAG&UAAUGUAUCAAGGUCACUGUCGGUCACACCGGUAACCUGCUGUC
mir-214
     ENSRNOG0000013013 3661 nt UTR 2 hits 475 1329
-----1----1-----1
>ENSRNOG00000013013 hs-mir-214 475
                     482
ACAGCAGGCACAGACAGGCAG&AGGCCCCUUCCCACCAGUGCUCGCCGUGUAUUUUGCCUGCUGUA
>ENSRNOG00000013013 hs-mir-214 1329 1336
ACAGCAGGCACAGACAGGCAG&UGUUUUAUUAAAGAAAAGCUAAAGACCGUGUGAGCCCUGCUGG
mir-214 SINFRUG00000141146 2000 nt UTR 1 hits 545
  >SINFRUG00000141146 hs-mir-214 545 552
```

ACAGCAGGCACAGACAGGCAG&CUUAUUUUAUUAAGUGUUAAAAACCCGUCUGAAUGCCUGCUGUG

```
miRNA: mir-218
Human predicted target: ENSG00000075240
Mouse predicted target: ENSMUSG00000035900
Rat predicted target: ENSRNOG00000016951
Rat predicted target: ENSRNOG00000016968
Fugu predicted target: SINFRUG00000149385
mir-218
      ENSG00000075240
                4536 nt UTR 2 hits 807 1609
 -----1-----1
>ENSG00000075240 hs-mir-218
                   807
                        814
UUGUGCUUGAUCUAACCAUGU&UGGGGACCAGUAAGGGCACAGGAUGGUGCAGGUAAAAGCACAU
>ENSG00000075240 hs-mir-218 1609
                       1616
UUGUGCUUGAUCUAACCAUGU&GGUGCUUUGGGGGGAGCUGCGCCGAUCACCAGAUUAAGCACAU
ENSMUSG00000035900 4090 nt UTR 3 hits 278 711 1359
mir-218
-----1----1-----1-----1-----1------
>ENSMUSG00000035900 hs-mir-218 278
                         285
UUGUGCUUGAUCUAACCAUGU&GAUGGCACACAAGACACUGGUCCUCAGGCCCUGCUAAGCACAGC
```

```
>ENSMUSG00000035900 hs-mir-218 711 718
UUGUGCUUGAUCUAACCAUGU&UCCUGUGAGGGCCCAGACUGGCGUAGUGUCGGCAAAAGCACAC
>ENSMUSG00000035900 hs-mir-218 1359 1366
UUGUGCUUGAUCUAACCAUGU&CUGGGGGUGGGAAGGGCUUGCCAGGCAACCAGAUCAAGCACAC
ENSRNOG00000016951 2000 nt UTR 1 hits 441
 >ENSRNOG00000016951 hs-mir-218 441 448
UUGUGCUUGAUCUAACCAUGU&CUAUUCUGUAAAGAUUGGGAAGACAGUCAUGAGUCAAGCACAGU
mir-218 ENSRNOG00000016968 2000 nt UTR 3 hits 271 678 1361
 >ENSRNOG00000016968 hs-mir-218 271 278
UUGUGCUUGAUCUAACCAUGU&GAUGGCACACAAGACACUGGACCUCAGGCCCUGCUAAGCACAGC
>ENSRNOG00000016968 hs-mir-218 678 685
UUGUGCUUGAUCUAACCAUGU&GUGUCCGGCGAGGGUCCAGAAUGGCGCGUCGGCAAAAGCACAC
.(((((((.....))))))))...))))...))))...))))...)
>ENSRNOG00000016968 hs-mir-218 1361 1368
UUGUGCUUGAUCUAACCAUGU&CUGGGGGUGGGAAGGGCUCGCCAGGCAACCAGAUCAAGCACAC
mir-218 SINFRUG00000149385 2000 nt UTR 2 hits 916 1859
```

```
>SINFRUG00000149385 hs-mir-218 916 923
UUGUGCUUGAUCUAACCAUGU&ACAGUUAGCCAGCGCAGGUCACAUCCGGCUGGUCCAAGCACAGC
>SINFRUG00000149385 hs-mir-218 1859 1866
UUGUGCUUGAUCUAACCAUGU&UUGAAGAACGGCUCCGAAGAGCUGCAAUCAGAACAAAGCACAGA
miRNA: mir-218
Human predicted target: ENSG00000119547
Mouse predicted target: ENSMUSG00000045991
Rat predicted target: ENSRNOG0000018299
Fugu predicted target: SINFRUG00000154314
Hs Gene description: ONE CUT DOMAIN FAMILY MEMBER 2 (ONECUT-2
TRANSCRIPTION FACTOR) (OC-2). [Source:SWISSPROT; Acc: 095948] NM 004852
mir-218
     ENSG00000119547 2109 nt UTR 3 hits 116 768 876
---1------
>ENSG00000119547 hs-mir-218 116
                           123
UUGUGCUUGAUCUAACCAUGU&GGAUUCCUAGCUGGGGCCCUUCACUGGUGAUUUGAAAGCACAAU
>ENSG00000119547 hs-mir-218
                      768
                           775
UUGUGCUUGAUCUAACCAUGU&AAAAAACCAGUCAGUUCACUUGCGCUCAAAGUAUCAAGCACAAC
```

```
>ENSG00000119547 hs-mir-218 876 883
UUGUGCUUGAUCUAACCAUGU&UGAAGUCAUUAGGGAAUUGAUGAGAAUAUGGCUUCAAGCACAU
mir-218 ENSMUSG00000045991 2000 nt UTR 3 hits 175 824 948
>ENSMUSG00000045991 hs-mir-218 175 182
UUGUGCUUGAUCUAACCAUGU&AGAUUCUUAGCUGGGGCCCUUCACUGGUGACUUGAAAGCACAAU
>ENSMUSG00000045991 hs-mir-218 824 831
UUGUGCUUGAUCUAACCAUGU&CAAAAAAAAGUCAAUUCACUUGAGCUCAAAGUAUCAAGCACAAC
>ENSMUSG00000045991 hs-mir-218 948
                      955
UUGUGCUUGAUCUAACCAUGU&UGAAGUCAUUAGGGAAUUAUUGGGAAUAUGGCUUCAAGCACAU
ENSRNOG00000018299 2000 nt UTR 3 hits 157 806 930
mir-218
-----1------
>ENSRNOG0000018299 hs-mir-218 157
                      164
UUGUGCUUGAUCUAACCAUGU&AGAUUCUUAACUGGGGCCCUUCACUGGUGACUUGAAAGCACAAU
((((((((.....))))))).....))))).....))))).....)
>ENSRNOG00000018299 hs-mir-218 806
                      813
UUGUGCUUGAUCUAACCAUGU&AAAAAAAAGUCAAUUCACUUGAGCUCAAAGUAUCAAGCACAAC
```

UUGUGCUUGAUCUAACCAUGU&UGAAGUCAUUAGGGAAUUAUUGGGAAUAUGGCUUCAAGCACAC mir-218 SINFRUG00000154314 2000 nt UTR 2 hits 791 928 >SINFRUG00000154314 hs-mir-218 791 798 UUGUGCUUGAUCUAACCAUGU&UGAUUUGACUCUUUAAAGAUGAAUGCUAAUGAUGCAAGCACAAA >SINFRUG00000154314 hs-mir-218 928 935 UUGUGCUUGAUCUAACCAUGU&GGUGCAUCUAUACAACAAAUGUGAGCACAAUUUUGAAGCACAU .(((((((.....)))).....)))))).....) miRNA: mir-218 Human predicted target: ENSG00000149582 Mouse predicted target: ENSMUSG00000002032 Rat predicted target: ENSRNOG00000014218 Fugu predicted target: SINFRUG00000152666 Hs Gene description: NM 032780 ENSG00000149582 3254 nt UTR 2 hits 550 801 mir-218 >ENSG00000149582 hs-mir-218 550 557

UUGUGCUUGAUCUAACCAUGU&CACAGAAACCAACCCCUGACCCAGCGGUACCGGCCAAGCACAA

>ENSRNOG00000018299 hs-mir-218 930 937

```
>ENSG00000149582 hs-mir-218 801 808
UUGUGCUUGAUCUAACCAUGU&AGCUAUGCAUCAUUUUCCUACGGCGUUAGCACUUUAAGCACAU
ENSMUSG00000002032 3196 nt UTR 2 hits 547 784
 >ENSMUSG00000002032 hs-mir-218
                 547 554
UUGUGCUUGAUCUAACCAUGU&GCUCAGGAACCAGCCCCUUGCCCAGGGACCUGGCCAAGCACAA
>ENSMUSG00000002032 hs-mir-218 784 791
UUGUGCUUGAUCUAACCAUGU&AGCUCUGCAUCGUUUUGUACAAGUGUCUGCAUUUUAAGCACAU
mir-218
     ENSRNOG00000014218 3122 nt UTR 4 hits 494 731 1611 1848
 >ENSRNOG00000014218 hs-mir-218 494
                     501
UUGUGCUUGAUCUAACCAUGU&GCUCAGGAACCAGCCCCUCACCCAGGGACCUGGCCAAGCACAAA
>ENSRNOG00000014218 hs-mir-218 731
                     738
UUGUGCUUGAUCUAACCAUGU&UAGCAAUGUAUCAUUUUGUACAGUGUCCUCAUAUUAAGCACAU
>ENSRNOG00000014218 hs-mir-218 1611
                    1618
UUGUGCUUGAUCUAACCAUGU&GCUCAGGAACCAGCCCCUCACCCAGGGACCUGGCCAAGCACAA
```

>ENSRNOG0000014218 hs-mir-218 1848 1855						
UUGUGCUUGAUCUAACCAUGU&UAGCAAUGUAUCAUUUUGUACAGUGUCCUCAUAUUAAGCACAU						
.((((((((((())))))))))16.30						
mir-218 SINFRUG00000152666 2000 nt UTR 2 hits 1717 1867						
11						
>SINFRUG00000152666 hs-mir-218 1717 1724						
UUGUGCUUGAUCUAACCAUGU&UGUUAGGUGGCUUUUGUGGCUUCAGUUUUGACUGGAAGCACAAU						
(((((((((((((((((((((((((((((((((((((((
>SINFRUG00000152666 hs-mir-218 1867 1874						
UUGUGCUUGAUCUAACCAUGU&UGUGGAAAUAUAUUUUUCCUCCAUUAACUUAAAAAAAGCACAU						
.((((((((()((((())))))))))))))))))))						
miRNA: mir-218						
Human predicted target: ENSG00000162105						
Mouse predicted target: ENSMUSG0000037541						
Rat predicted target: ENSRNOG00000020806						
Fugu predicted target: SINFRUG00000153210						
Hs Gene description: SH3 AND MULTIPLE ANKYRIN REPEAT DOMAINS PROTEIN 2 (SHANK2). [Source:SWISSPROT; Acc:Q9UPX8] NM_012309						
mir-218 ENSG00000162105 7013 nt UTR 3 hits 764 1713 6238						
111						
1						
>ENSG00000162105 hs-mir-218 764 771						

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UUGUGCUUGAUCUAACCAUGU&AAGGUGGCCAAGCAGAUGUCACAUGGAGUUAGUCAAAGCACAAA
>ENSG00000162105 hs-mir-218 1713 1720
UUGUGCUUGAUCUAACCAUGU&UACUGCAAGUUUAAAUAGUUGUACAGAUAGUUUAUAAGCACAAU
>ENSG00000162105 hs-mir-218 6238 6245
UUGUGCUUGAUCUAACCAUGU&ACACAUAGCCCCUGCAGCCCUGCAGAGGUGGCCACAAGCACAAG
mir-218
     ENSMUSG00000037541 2000 nt UTR 2 hits 675 1395
 ------1----1-----1
>ENSMUSG00000037541 hs-mir-218 675
                       682
UUGUGCUUGAUCUAACCAUGU&AGGGUGGCCAAAAUGAAGUCACACGGAGUUAGUCAAAGCACAAA
>ENSMUSG00000037541 hs-mir-218 1395 1402
UUGUGCUUGAUCUAACCAUGU&UACUGCAAGUUUAAAUAUGUGUACAGAUAGUUCAUAAGCACAAU
mir-218
    ENSRNOG00000020806 2000 nt UTR 3 hits 687 755 1603
  >ENSRNOG00000020806 hs-mir-218 687 694
UUGUGCUUGAUCUAACCAUGU&AGGGUGGCCAAACUGAAGUCACACGGAGUUAGUCAAAGCACAAA
>ENSRNOG00000020806 hs-mir-218 755 762
UUGUGCUUGAUCUAACCAUGU&GCCUGGCCAUAGAGCCAGCCAAUGUGUGGCUGCCCAAGCACAC
```

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>ENSRNOG00000020806 hs-mir-218 1603 1610
UUGUGCUUGAUCUAACCAUGU&UACUGCAAGUUUAAAUACGUGUACAGAUAGUUCAUAAGCACAAU
mir-218
      SINFRUG00000153210 2000 nt UTR 1 hits 1360
 ------1----1
>SINFRUG00000153210 hs-mir-218 1360
                         1367
UUGUGCUUGAUCUAACCAUGU&AAGAGGGUCACUUUAAGCCCAGUAACAUGCAUCUCAAGCACAAG
miRNA: mir-219
Human predicted target: ENSG00000070610
Mouse predicted target: ENSMUSG00000028467
Rat predicted target: ENSRNOG0000016364
Fugu predicted target: SINFRUG00000130115
Hs Gene description: BILE ACID BETA-GLUCOSIDASE.
[Source:RefSeq;Acc:NM 020944]
mir-219 ENSG00000070610 2000 nt UTR 1 hits 97
>ENSG00000070610 hs-mir-219 97 104
UGAUUGUCCAAACGCAAUUCU&UCCCCUCUGAACCUCGCAACCCUGAGCCAUCAGGACAAUCAU
```

mir-219 ENSMUSG00000028467 2260 nt UTR 1 hits 81 >ENSMUSG00000028467 hs-mir-219 81 88 UGAUUGUCCAAACGCAAUUCU&UUCCUCCCACAAGUCCUGCAGCCCUGAGCCAAUAGGACAAUCGC mir-219 ENSRNOG00000016364 2288 nt UTR 1 hits 124 >ENSRNOG00000016364 hs-mir-219 124 131 UGAUUGUCCAAACGCAAUUCU&UCCUUCCCACAAGUCCUGCAGCCCUGAGCCAAUAGGACAAUCAU mir-219 SINFRUG00000130115 2000 nt UTR 1 hits 1097 -----1-----1 >SINFRUG00000130115 hs-mir-219 1097 1104 UGAUUGUCCAAACGCAAUUCU&UAUCAACUUCUCACUUAUGUGUUUUAUAAAAAAUUGACAAUCAU

miRNA: mir-219

Human predicted target: ENSG00000171656

Mouse predicted target: ENSMUSG0000013089

Rat predicted target: ENSRNOG0000001785

Fugu predicted target: SINFRUG00000148138

>SINFRUG00000148138 hs-mir-219 276 283 UGAUUGUCCAAACGCAAUUCU&UUAAAAACCUAAAGAGCUGUUACAUCUCUGUCUGUGACAAUCU >SINFRUG00000148138 hs-mir-219 1660 1667 UGAUUGUCCAAACGCAAUUCU&UUUAUAAUACUAUAAGUUAGAUUCCUGACAGGGUGGACAAUCU miRNA: mir-219 Human predicted target: ENSG00000179361 Mouse predicted target: ENSMUSG0000004661 Rat predicted target: ENSRNOG00000019677 Fugu predicted target: SINFRUG00000125291 Hs Gene description: DEAD RINGER-LIKE 2; DEAD RINGER DROSOPHILA HOMOLOG 2; BRIGHT AND DEAD RINGER HOMOLOG. [Source:RefSeq;Acc:NM 006465] NM 006465 mir-219 ENSG00000179361 4357 nt UTR 1 hits 313 >ENSG00000179361 hs-mir-219 313 320 UGAUUGUCCAAACGCAAUUCU&CCCCAGCCACCUCCCAGCUCAGGGCACAGUGUAUCGACAAUCU .(((((((...((((.................)))))...)))))...)))))... mir-219 ENSMUSG00000004661 2002 nt UTR 1 hits 1485 ------1-----1 >ENSMUSG00000004661 hs-mir-219 1485 1492

miRNA: mir-221

Human predicted target: ENSG00000112183

Mouse predicted target: ENSMUSG00000038132

Rat predicted target: ENSRNOG00000016925

Fugu predicted target: SINFRUG00000136995

Hs Gene description: NM 153020

mir-221 ENSG00000112183 3747 nt UTR 2 hits 403 1214

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_____1___1____1
>ENSG00000112183 hs-mir-221 403
                      410
AGCUACAUUGUCUGCUGGGUUUC&AAUCUAGUUGAACCAGGGAAUACAGAGCGAGCAAUAUGUAGCUU
22.50
>ENSG00000112183 hs-mir-221 1214 1221
AGCUACAUUGUCUGCUGGGUUUC&UUCAUCUCAUGGCAUAAAUUAUUUAGUAAGUCUAGAUGUAGCG
mir-221
     ENSMUSG00000038132 2000 nt UTR 2 hits 493 1307
._____1___1___1____1____1______
>ENSMUSG00000038132 hs-mir-221 493
                        500
AGCUACAUUGUCUGCUGGGUUUC&AAUCUAGUUGAACCAGGGAAUACGGAGUGAGCAAUAUGUAGCUU
20.70
>ENSMUSG00000038132 hs-mir-221 1307 1314
AGCUACAUUGUCUGCUGGGUUUC&UUCAUCUCAUGGCAUAAGUUAUUCAGUAGGUCUAGAUGUAGCA
mir-221
     ENSRNOG00000016925 2400 nt UTR 3 hits 370 716 1532
 -----1-----1-----1-----1
>ENSRNOG00000016925 hs-mir-221 370 377
AGCUACAUUGUCUGCUGGGUUUC&AAUCUAGCUGAACCAGGGAAUACGGAGUGCACAAUAUGUAGCUU
21.77
>ENSRNOG00000016925 hs-mir-221 716
                        723
```

AGCUACAUUGUCUGCUGGGUUUC&AAUCUAGCUGAACCAGGGAAUACGGAGUGCACAAUAUGUAGCUU							
((((((((((((((((((((((((((((((((((((((
>ENSRNOG0000016925 hs-mir-221 1532 1539							
AGCUACAUUGUCUGCUGGGUUUC&UUCAUCUCAUGGCAUAAGUUAUUCAGUAGGUCUAGAUGUAGCA							
.((((((((((((((((((((((((((((((((((((((
mir-221 SINFRUG00000136995 2000 nt UTR 1 hits 123							
1							
>SINFRUG00000136995 hs-mir-221 123 130							
AGCUACAUUGUCUGCUGGGUUUC&GGGCUGUACGAUGGGUGUCACCUCCCGGUUUUUUAAUGUAGCA							
.(((((((((((())))))))))))))26.60							
miRNA: mir-221							
Human predicted target: ENSG00000117016							
Mouse predicted target: ENSMUSG0000032890							
Rat predicted target: ENSRNOG0000011171							
Rat predicted target: ENSRNOG0000011337							
Fugu predicted target: SINFRUG0000149709							
Hs Gene description: NM_014747							
mir-221 ENSG00000117016 7837 nt UTR 5 hits 510 613 2278 3590 4418							
11							

```
>ENSG00000117016 hs-mir-221
                510
                   517
AGCUACAUUGUCUGCUGGGUUUC&UUGACUCUCCCGGCUCUGCCACUGUUUUCUGAGAAAUGUAGCA
>ENSG00000117016 hs-mir-221 613
                   620
AGCUACAUUGUCUGCUGGGUUUC&GGCAGCUCUUCCUGCCACUGAAUGCGUUCUGCAGCAUGUAGCA
>ENSG00000117016 hs-mir-221 2278 2285
AGCUACAUUGUCUGCUGGGUUUC&GUUAGUGACCCACAGGACAGUAUAGAUGUUUGUGGAUGUAGCA
>ENSG00000117016 hs-mir-221 3590
                  3597
>ENSG00000117016 hs-mir-221 4418 4425
AGCUACAUUGUCUGCUGGGUUUC&GGACCUUGUUCUCUGAUAAAGGGCUUAAUCUUUCCAUGUAGCA
mir-221
     ENSMUSG00000032890 2000 nt UTR 2 hits 456 564
  >ENSMUSG00000032890 hs-mir-221 456
                     463
AGCUACAUUGUCUGCUGGGUUUC&CUUUGCCUCUCCCAGCAUUGCUGCUUUUUUUGAGGAAUGUAGCA
>ENSMUSG00000032890 hs-mir-221 564
                     571
AGCUACAUUGUCUGCUGGGUUUC&CACUGGUGGUCAUCCCAUUGAAUGCACUCCACAGCAUGUAGCA
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mir-221 ENSRNOG00000011171 2199 nt UTR 2 hits 468 576
------1---1----1----1
>ENSRNOG00000011171 hs-mir-221 468 475
AGCUACAUUGUCUGCUGGGUUUC&UUGCCUCCCAGCAUUGCUGCUCUUUUUUUGAGGAAUGUAGCA
>ENSRNOG00000011171 hs-mir-221 576 583
AGCUACAUUGUCUGCUGGGUUUC&CGAUGGUGGUCAACCCAUUGAACGCACUCCACAGCAUGUAGCA
mir-221
    ENSRNOG00000011337 2000 nt UTR 2 hits 468 576
>ENSRNOG00000011337 hs-mir-221 468 475
AGCUACAUUGUCUGCUGGGUUUC&UUGCCUCCCAGCAUUGCUGCUCUUUUUUUGAGGAAUGUAGCA
>ENSRNOG00000011337 hs-mir-221 576
                        583
AGCUACAUUGUCUGCUGGGUUUC&CGAUGGUGGUCAACCCAUUGAACGCACUCCACAGCAUGUAGCA
mir-221 SINFRUG00000149709 2000 nt UTR 2 hits 222 442
-----1----1----1-----1
>SINFRUG00000149709 hs-mir-221 222 229
AGCUACAUUGUCUGCUGGGUUUC&UUUUAGGCACGACGCAGAUAUGAUUUUAUGAGAACAUGUAGCA
>SINFRUG00000149709 hs-mir-221 442 449
AGCUACAUUGUCUGCUGGGUUUC&AAUAGGCGAGCUAGUACACAAUAUAAAGUAUAGAUAUGUAGCA
```

```
miRNA: mir-221
Human predicted target: ENSG00000129757
Mouse predicted target: ENSMUSG00000037664
Rat predicted target: ENSRNOG00000020559
Fugu predicted target: SINFRUG00000123421
HS Gene description: CYCLIN-DEPENDENT KINASE INHIBITOR 1C (CYCLIN-
DEPENDENT KINASE INHIBITOR P57) (P57KIP2). [Source:SWISSPROT; Acc:P49918]
   NM 000076
mir-221 ENSG00000129757 2286 nt UTR 3 hits 86 450 1328
---1------1----1-----1
>ENSG00000129757 hs-mir-221 86 93
AGCUACAUUGUCUGCUGGGUUUC&GUUGGAAGGGCGCUGGGCCUCGGCUGGGACCGUUCAUGUAGCA
>ENSG00000129757 hs-mir-221 450 457
AGCUACAUUGUCUGGGUUUC&GUUGGAAGGGCGCUGGGCCUCGGCUGGGACCGUUCAUGUAGCA
>ENSG00000129757 hs-mir-221 1328 1335
AGCUACAUUGUCUGCUGGGUUUC&ACCUGCGGGCUGCAGAAAGACAAGCCUGGACUUCAUGUAGCC
mir-221
      ENSMUSG00000037664 2313 nt UTR 2 hits 95 493
```

miRNA: mir-223

Human predicted target: ENSG00000135945

Mouse predicted target: ENSMUSG00000026082

Rat predicted target: ENSRNOG00000018623

Fugu predicted target: SINFRUG00000153974

```
Hs Gene description: REV1-LIKE; REV1 PROTEIN; REV1 (YEAST HOMOLOG) - LIKE.
[Source:RefSeq;Acc:NM 016316] NM 016316
mir-223
      ENSG00000135945 2000 nt UTR 1 hits 1636
>ENSG00000135945 hs-mir-223 1636 1643
UGUCAGUUUGUCAAAUACCCCAA&GAGUGAACAGGCACAUUGGAACUGUGGGGACAUGUAACUGACC
mir-223
     ENSMUSG00000026082 2300 nt UTR 1 hits 1224
  -----1-----1
>ENSMUSG00000026082 hs-mir-223 1224
                         1231
UGUCAGUUUGUCAAAUACCCCAA&GGGUGAGUGCAGGCACGCUGGACUGUGGGCGGGGAACUGACC
mir-223
      ENSRNOG00000018623 2000 nt UTR 1 hits 1082
 -----1------1
>ENSRNOG00000018623 hs-mir-223 1082 1089
UGUCAGUUUGUCAAAUACCCCAA&AGGUGAGUGCAGGCACGCUGGACUGUGGGGCGGGGAACUGACC
mir-223 SINFRUG00000153974 2000 nt UTR 1 hits 1923
--1---
>SINFRUG00000153974 hs-mir-223 1923 1930
UGUCAGUUUGUCAAAUACCCCAA&UACUAUUUAGGGUACAAAAAAAGUGUUGAUCGUUAACUGACC
```