

RNAhybrid checked on 6-28-22

[https://bibiserv.cebitec.uni-](https://bibiserv.cebitec.uni-bielefeld.de/rnahybrid?viewType=submission&subType=rnahybrid_function_rnahybrid_p_1)

[bielefeld.de/rnahybrid?viewType=submission&subType=rnahybrid_function_rnahybrid_p_1](https://bibiserv.cebitec.uni-bielefeld.de/rnahybrid?viewType=submission&subType=rnahybrid_function_rnahybrid_p_1)

for tDR-Gly (5'- GCGTTGGTGGTATAGTGGTGAGCATAGCTG)

for tDR-Val (5'-GTTTCCGTAGTGTAGTGGTTATCACGTTTCGC

The reference sequence Reference (NC_045512.2)

Index Sequence top 25 tDR-Val

Version: RNAhybrid 2.2

Command line: /vol/bioapps/bin/RNAhybrid.bin -t

/var/bibiserv2/anonymous/rnahybrid/28/15/08/bibiserv2_2022-06-

28_150830_318kK/rnahybrid_input_target_rna_sequences.file -s 3utr_human -q

/var/bibiserv2/anonymous/rnahybrid/28/15/08/bibiserv2_2022-06-

28_150830_318kK/rnahybrid_input_mirna_sequences.file -b 25 -n 31 -m 29903

searching

dataset: 1

mde of 5027: -64.200005

Individual hits

dataset: 1

target: NC_045512.2

length: 29903

miRNA : 5027

length: 31

mfe: -31.0 kcal/mol

p-value: 1.000000e+00

position 6158

target 5' G GAUUAUAA A 3'

GUG AUGUGGUGGCUAUU ACACUAC

CGC UGCACUAUUGGUGA UGUGAUG

miRNA 3' U CCUUUG 5'

dataset: 1

target: NC_045512.2

length: 29903

miRNA : 5027

length: 31

mfe: -30.9 kcal/mol

p-value: 1.000000e+00

position 29704

target 5' A U AAG C UUCACCGAGGCCAC U G 3'

GGAC UGA AGCCAC ACAUU GCGGAG AC

CUUG ACU UUGGUG UGUGA UGCCUU UG
miRNA 3' CG C A A 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -30.5 kcal/mol
p-value: 1.000000e+00

position 5507
target 5' U UGUAAA UG G A A C A 3'
UGAACGUGGUG ACU UG AC AC G AGAC
GCUUGCACUAU UGG AU UG UG C UUUG
miRNA 3' C UG G A C 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -30.0 kcal/mol
p-value: 1.000000e+00

position 6453
target 5' A U A CGAAG UG A 3'
GUG AAUGUGA AACUAC U UA GGAGAC
CGC UUGCACU UUGGUG G AU CCUUUG
miRNA 3' A AU UG G 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -29.9 kcal/mol
p-value: 1.000000e+00

position 29253
target 5' C G U A U C 3'
G GAACGUGG UGACC UACAC GG GC
C CUUGCACU AUUGG AUGUG CC UG
miRNA 3' G UG AUG UU 5'

dataset: 1

target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -29.6 kcal/mol
p-value: 1.000000e+00

position 12237
target 5' U C CA GCA GUAAGU A 3'
UGA CGUGAUG GCCAU AC UGGAAA
GCU GCACUAU UGGUG UG GCCUUU
miRNA 3' C U AUG AU G 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -29.3 kcal/mol
p-value: 1.000000e+00

position 10117
target 5' U CA UA UCUUU U 3'
UGUGGUA ACUACACU ACGG GGC
GCACUAU UGAUGUGA UGCC UUG
miRNA 3' CGCUU UGG U 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -29.2 kcal/mol
p-value: 1.000000e+00

position 10668
target 5' U U UGUA UG UAUAA A 3'
AGC UGGU CGCUGC U AUGGAGAC
UUG ACUA GUGAUG A UGCCUUUG
miRNA 3' CGC C UUG UG 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -29.0 kcal/mol

p-value: 1.000000e+00

position 1457
target 5' C A G CGC UU U 3'
GU AG GUGGU ACUAUUGC CU GGAGGC
CG UU CACUA UGGUGAUG GA CCUUUG
miRNA 3' C G U U UG 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -29.0 kcal/mol
p-value: 1.000000e+00

position 8780
target 5' A C GG AG AU CAA U 3'
GC AGCGUGGU U UUAUACUA GA AGC
CG UUGCACUA G GAUGUGAU CU UUG
miRNA 3' C UU GU GC 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -29.0 kcal/mol
p-value: 1.000000e+00

position 29096
target 5' G A GA AACCCAA U 3'
GC GACGUGGU CCA ACA GGAAAU
CG UUGCACUA GGU UGU CCUUUG
miRNA 3' C UU GA GAUG 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -28.7 kcal/mol
p-value: 1.000000e+00

position 6366
target 5' A G A C 3'
G GAAUG GAUAAUC UUGC CUGCG AGAU
C CUUGC CUAUUGG GAUG GAUGC UUUG

miRNA 3' G A U U C 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -28.6 kcal/mol
p-value: 1.000000e+00

position 4158
target 5' C UAU U AAAAAGGCUGGUG U G 3'
UGUGGU ACC ACU GCACUAC GAAAU
GCACUA UGG UGA UGUGAUG CUUUG
miRNA 3' CGCUU U C 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -28.4 kcal/mol
p-value: 1.000000e+00

position 27073
target 5' C UAGCAG CAGGUUUU AUACAGUC A UU A 3'
GC AGCGUG GUGACU GCUGC GCUAC GGA GGC
CG UUGCAC UAUUGG UGAUG UGAUG CCU UUG
miRNA 3' C 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -28.0 kcal/mol
p-value: 1.000000e+00

position 2246
target 5' G AAAU UC UG AA U 3'
GUGGAC UG ACC UGCA GGAAAU
CGCUUG AC UGG AUGU CCUUUG
miRNA 3' C UAU UG GAUG 5'

dataset: 1
target: NC_045512.2

length: 29903
miRNA : 5027
length: 31

mfe: -27.8 kcal/mol
p-value: 1.000000e+00

position 8700
target 5' U UG CGUGACAU A U U 3'
UGA GUGGUG UCACU GCA CUAC GA AC
GCU CACUAU GGUGA UGU GAUG CU UG
miRNA 3' C UG U C U 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 653
target 5' G A C 3'
GAGC UGGUGGCCAU GUUACGG
CUUG ACUAUUGGUG UGAUGCC
miRNA 3' CG C AUG UUUG 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 28592
target 5' A UG UU C 3'
GA GU AU CUACUAC CUA GGAA
CU CA UA GGUGAUG GAU CCUU
miRNA 3' CG UG C UU U G UG 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 17157
target 5' A UU UCUCAU GUUGAU U A 3'
GC GC GCCGCU GCACUAUG GAGA
CG UG UGGUGA UGUGAUGC CUUU
miRNA 3' CU CACUAU G 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 19843
target 5' U GG ACAUU A UGAUC CU A 3'
UG UGUGG GCUGCU AUACUG UGGGA AC
GC GCACU UGGUGA UGUGAU GCCUU UG
miRNA 3' C UU AU 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 776
target 5' C ACUCAU GCU GGAGGGGCAUA UC A 3'
GUGA GCGUGA UAAC CACU CGCUAUG GAU
CGCU UGCACU AUUG GUGA GUGAUGC UUG
miRNA 3' U CU 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -27.6 kcal/mol
p-value: 1.000000e+00

position 25931
target 5' C A CU GAUUGGUGG GAAAA C 3'
UGAAC UGA ACCA UUAUACU AUGGGAAU
GCUUG ACU UGGU GAUGUGA UGCCUUUG
miRNA 3' C C AU 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -27.4 kcal/mol
p-value: 1.000000e+00

position 3519
target 5' U C AUA UAAU C 3'
UGAAU UGAUGAUUAC GCUAC GGA
GCUUG ACUAUUGGUG UGAUG CCU
miRNA 3' C C AUG UUG 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -27.4 kcal/mol
p-value: 1.000000e+00

position 4590
target 5' A ACUCU UACAAU UG U A 3'
UGAA UGU GCCACU GCUAUG AAC
GCUU GCA UGGUGA UGAUGC UUG
miRNA 3' C CUAU UG CU 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5027
length: 31

mfe: -27.3 kcal/mol
p-value: 1.000000e+00

position 335
target 5' C CUCG GUG UU U 3'
GCG ACGUG UAC GCU GGAGAC
CGC UGCAC GUG UGA CCUUUG
miRNA 3' U UAUUG AUG UG 5'

Index sequence top 25 tDR-Gly

Version: RNAhybrid 2.2

Command line: /vol/bioapps/bin/RNAhybrid.bin -m 29903 -n 30 -t
/var/bibiserv2/anonymous/rnahybrid/28/15/46/bibiserv2_2022-06-
28_154601_KSR7p/rnahybrid_input_target_rna_sequences_.file -b 25 -q
/var/bibiserv2/anonymous/rnahybrid/28/15/46/bibiserv2_2022-06-
28_154601_KSR7p/rnahybrid_input_mirna_sequences.file -s 3utr_human
searching

dataset: 1

mde of 5008c: -65.000008

Individual hits

dataset: 1

target: NC_045512.2

length: 29903

miRNA : 5008c

length: 30

mfe: -35.7 kcal/mol

p-value: 1.000000e+00

position 1486

target 5' A GUUCUCUUAUGUUGG AACAAG UAUUGGGUCCACGU U
3'

GGCUGUGU

UUGCCAU

UGUGCC

GCUAGCGC

UCGAUACG

AGUGGUG

AUAUGG

UGGUUGCG

miRNA 3' G

5'

dataset: 1

target: NC_045512.2

length: 29903

miRNA : 5008c

length: 30

mfe: -35.3 kcal/mol

p-value: 1.000000e+00

position 10397

target 5' U UGUUACAAUG U GUGU G 3'

UAGCU

GUUCACCA CUG

UUACCAAUGU

GUCGA

CGAGUGGU GAU

GGUGGUUGCG

miRNA 3'

UA

AU

5'

dataset: 1

target: NC_045512.2

length: 29903

miRNA : 5008c

length: 30

mfe: -35.2 kcal/mol
p-value: 1.000000e+00

position 17155
target 5' A GUU A 3'
CAGCU UGCUC UCAU GCCGCU GAUGC
GUCCA ACGAG GGUG UGGUGG UUGCG
miRNA 3' U U AUA 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -33.0 kcal/mol
p-value: 1.000000e+00

position 14574
target 5' U A UCUGGUAUUC GAUAA A 3'
GCUAUGC CGCUGCU UAUUACUA ACGC
CGAUACG GUGGUGA AUGGUGGU UGCG
miRNA 3' GU A U 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -32.9 kcal/mol
p-value: 1.000000e+00

position 13760
target 5' A GAC G A GU C 3'
CGGU AUG UACCAC UAUAUCAC CAACGU
GUCC UAC GUGGUG AUAUGGUG GUUGCG
miRNA 3' A GA 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -32.7 kcal/mol
p-value: 1.000000e+00

position 17433
target 5' U GACCC AU UG CC A 3'
GGC UGCUCA UACC CA ACGC

UCG ACGAGU AUGG GU UGCG
miRNA 3' G AU GGUGAU UG 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -32.5 kcal/mol
p-value: 1.000000e+00

position 28420
target 5' U GUCUUG CUC U A UG A 3'
GC GUUCACCGCU AC CA CA GC
CG CGAGUGGUGA UG GU GU CG
miRNA 3' GU AUA UA G UG 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -32.4 kcal/mol
p-value: 1.000000e+00

position 29506
target 5' G A G CAACUCAGGCCUAA CAUGCAG A G A 3'
AGC GUGCU ACU ACU ACCAC CAA GC
UCG UACGA UGG UGA UGGUG GUU CG
miRNA 3' G A G UA G 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -32.3 kcal/mol
p-value: 1.000000e+00

position 26706
target 5' U UGUUUU UU AGAAUAAAUUGGAU GG G 3'
UAGCU GUGCUUGCUGCUGU AC CACC UG
GUCGA UACGAGUGGUGAUA UG GUGG GC
miRNA 3' UU G 5'

dataset: 1

target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -32.3 kcal/mol
p-value: 1.000000e+00

position 24226
target 5' U GCAG G AA UGCU A 3'
GGU GUGCU CAUUAU AUACCAU AUGC
UCG UACGA GUGGUG UAUGGUG UGCG
miRNA 3' G A A U 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -32.0 kcal/mol
p-value: 1.000000e+00

position 4679
target 5' C CAGUUUC UUCU UG GUUA A 3'
CAGCUA UGU UCACC AUGCU CAGCGU
GUCGAU ACG AGUGG UAUGG GUUGCG
miRNA 3' UGA UG 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -32.0 kcal/mol
p-value: 1.000000e+00

position 26800
target 5' U CUUCAU UUCAG U UG GU G 3'
CAGCUA UGCUU CU ACUG U CGC ACGC
GUCGAU ACGAG GG UGAU A GUG UGCG
miRNA 3' U UG GU 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -31.7 kcal/mol

p-value: 1.000000e+00

position 16927
target 5' A A CAUUAAGUG UAC G AAGA A 3'
CAGU AUGC CACC ACUA UGCCAC GC
GU CG UACG GUGG UGAU AUGGUG CG
miRNA 3' A A GUUG 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -31.7 kcal/mol
p-value: 1.000000e+00

position 4179
target 5' A GG AAA A 3'
GGCUG GU CACUACUG UGCUAGCG
UCGAU CG GUGGUGAU GUGGUUGC
miRNA 3' G A A AUG G 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -31.6 kcal/mol
p-value: 1.000000e+00

position 1317
target 5' A AAG UGUGGUUACU AA U 3'
AG GUGC CACUACU UACC CCA AUGC
UC UACG GUGGUGA AUGG GGU UGCG
miRNA 3' G GA A U U 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -31.6 kcal/mol
p-value: 1.000000e+00

position 29174
target 5' U C AAA UG AAUU C U 3'
GGC GC U CAC UGCC CCAGCGC
UCG CG G GUG AUGG GGUUGCG

miRNA 3' G AUA A UG AU U 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -31.5 kcal/mol
p-value: 1.000000e+00

position 26994
target 5' C UGACAUCAAGGACC CUAAGAAA GUU C G U 3'
GCUG UGC UCACU GCUA AUCAC AACGC
CGAU ACG AGUGG UGAU UGGUG UUGCG
miRNA 3' GU A G 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -31.5 kcal/mol
p-value: 1.000000e+00

position 14789
target 5' U G UA G CGUUAUAAU A 3'
CAGC AU U ACUACUAU CUACCAAC
GUCG UA A UGGUGAUA GGUGGUUG
miRNA 3' A CG G U CG 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -31.4 kcal/mol
p-value: 1.000000e+00

position 16205
target 5' A ACA AGU UAC G U 3'
GGCUAUGU CACCGC AUAC CU A GC
UCGAUACG GUGGUG UAUG GG U CG
miRNA 3' G A A GU U G 5'

dataset: 1
target: NC_045512.2

length: 29903
miRNA : 5008c
length: 30

mfe: -31.4 kcal/mol
p-value: 1.000000e+00

position 29716
target 5' A AUUU G C 3'
 GC CACCAC UCACCGA GC
 CG GUGGUG GGUGGUU CG
miRNA 3' GUCGAUA A AUAU G 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -31.3 kcal/mol
p-value: 1.000000e+00

position 11107
target 5' U GGUA U UU A 3'
 GCUAUG UUAUUGCUAUG CUGCU UGC
 CGAUAC AGUGGUGAUAU GGUGG GCG
miRNA 3' GU G UU 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -31.2 kcal/mol
p-value: 1.000000e+00

position 13228
target 5' U G A UGU GU U C 3'
 GGU GUGC UCG U CUGUACUGCCG UGC
 UCG UACG AGU G GAUAUGGUGGU GCG
miRNA 3' G A GU U 5'

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

mfe: -31.1 kcal/mol
p-value: 1.000000e+00

```

position 1178
target 5' C      G      AAUGA      A      AUG      C 3'
      CAGU  UGC UCACCA      AUGC ACCAA  UGC
      GUCG  ACG AGUGGU      UAUG UGGUU  GCG
miRNA 3'      AU      GA      G      5'

```

```

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

```

```

mfe: -31.1 kcal/mol
p-value: 1.000000e+00

```

```

position 2865
target 5' A      AAA  A      UG  UG  G  G      U 3'
      AGU  UG GUUCGCC  UGU  UG CA AUGC
      UCG  AU CGAGUGG  AUA  GU GU UGCG
miRNA 3' G      A      UG  UG  G      5'

```

```

dataset: 1
target: NC_045512.2
length: 29903
miRNA : 5008c
length: 30

```

```

mfe: -30.9 kcal/mol
p-value: 1.000000e+00

```

```

position 18233
target 5' A      A  G      ACAUGUU      C  A 3'
      AGUU AUG UUACC CUA      UAUCACC GCG
      UCGA UAC AGUGG GAU      AUGGUGG UGC
miRNA 3' G      G      U      U      G 5'

```

Alpha tDR-Val

Version: RNAhybrid 2.2

Command line:/vol/bioapps/bin/RNAhybrid.bin -s 3utr_human -t
/var/bibiserv2/anonymous/rnahybrid/28/15/15/bibiserv2_2022-06-
28_151531_1DZ1c/rnahybrid_input_target_rna_sequences.file -m 29851 -q
/var/bibiserv2/anonymous/rnahybrid/28/15/15/bibiserv2_2022-06-
28_151531_1DZ1c/rnahybrid_input_mirna_sequences.file -b 25 -n 31
searching
dataset: 1
mde of 5027: -64.200005
Individual hits

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -31.0 kcal/mol
p-value: 1.000000e+00

position 6158
target 5' G GAUUAUAA A 3'
GUG AUGUGGUGGCUAUU ACACUAC
CGC UGCACUAUUGGUGA UGUGAUG
miRNA 3' U CCUUUG 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -30.9 kcal/mol
p-value: 1.000000e+00

position 29685
target 5' A U AAG C UUCACCGAGGCCAC U G 3'
GGAC UGA AGCCAC ACAUU GCGGAG AC
CUUG ACU UUGGUG UGUGA UGCCUU UG
miRNA 3' CG C A A 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -30.5 kcal/mol
p-value: 1.000000e+00

position 5507
target 5' U UGUAAA UG G A A C A 3'
UGAACGUGGUG ACU UG AC AC G AGAC

miRNA 3' C GCUUGCACUAU UGG AU UG UG C UUUG 5'
UG G A C

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -30.0 kcal/mol
p-value: 1.000000e+00

position 6453
target 5' A U A CGAAG UG A 3'
GUG AAUGUGA AACUAC U UA GGAGAC
CGC UUGCACU UUGGUG G AU CCUUUG
miRNA 3' A AU UG G 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -29.9 kcal/mol
p-value: 1.000000e+00

position 29234
target 5' C G U A U C 3'
G GAACGUGG UGACC UACAC GG GC
C CUUGCACU AUUGG AUGUG CC UG
miRNA 3' G UG AUG UU 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -29.6 kcal/mol
p-value: 1.000000e+00

position 12228
target 5' U C CA GCA GUAAGU A 3'
UGA CGUGAUG GCCAU AC UGGAAA
GCU GCACUAU UGGUG UG GCCUUU
miRNA 3' C U AUG AU G 5'

dataset: 1

target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -29.3 kcal/mol
p-value: 1.000000e+00

position 10117
target 5' U CA UA UCUUU U 3'
UGUGGUA ACUACACU ACGG GGC
GCACUAU UGAUGUGA UGCC UUG
miRNA 3' CGCUU UGG U 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -29.2 kcal/mol
p-value: 1.000000e+00

position 10668
target 5' U U UGUA UG UAUAA A 3'
AGC UGGU CGCUGC U AUGGAGAC
UUG ACUA GUGAUG A UGCCUUUG
miRNA 3' CGC C UUG UG 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -29.0 kcal/mol
p-value: 1.000000e+00

position 1457
target 5' C A G CGC UU U 3'
GU AG GUGGU ACUAUUGC CU GGAGGC
CG UU CACUA UGGUGAUG GA CCUUUG
miRNA 3' C G U U UG 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -29.0 kcal/mol

p-value: 1.000000e+00

position 8780

```
target 5' A C          GG AG          AU CAA U 3'
          GC AGCGUGGU U UUAUACUA GA AGC
          CG UUGCACUA G GAUGUGAU CU UUG
miRNA 3' C          UU GU          GC          5'
```

dataset: 1

target: OV054768.1

length: 29851

miRNA : 5027

length: 31

mfe: -29.0 kcal/mol

p-value: 1.000000e+00

position 29077

```
target 5' G A          GA AACCCAA U 3'
          GC GACGUGGU CCA ACA          GGAAAU
          CG UUGCACUA GGU UGU          CCUUUG
miRNA 3' C          UU GA GAUG          5'
```

dataset: 1

target: OV054768.1

length: 29851

miRNA : 5027

length: 31

mfe: -28.7 kcal/mol

p-value: 1.000000e+00

position 6366

```
target 5' A G          A C 3'
          G GAAUG GAUAAUC UUGC CUGCG AGAU
          C CUUGC CUAUUGG GAUG GAUGC UUUG
miRNA 3' G A          U U C          5'
```

dataset: 1

target: OV054768.1

length: 29851

miRNA : 5027

length: 31

mfe: -28.6 kcal/mol

p-value: 1.000000e+00

position 4158

```
target 5' C          UAU U AAAAAGGCUGGUG U G 3'
          UGUGGU ACC ACU          GCACUAC GAAAU
          GCACUA UGG UGA          UGUGAUG CUUUG
```

miRNA 3' CGCUU U C 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -28.4 kcal/mol
p-value: 1.000000e+00

position 27055
target 5' C UAGCAG CAGGUUUU AUACAGUC A UU A 3'
GC AGCGUG GUGACU GCUGC GCUAC GGA GGC
CG UUGCAC UAUUGG UGAUG UGAUG CCU UUG
miRNA 3' C 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -28.0 kcal/mol
p-value: 1.000000e+00

position 2246
target 5' G AAAU UC UG AA U 3'
GUGGAC UG ACC UGCA GGAAAU
CGCUUG AC UGG AUGU CCUUUG
miRNA 3' C UAU UG GAUG 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -27.8 kcal/mol
p-value: 1.000000e+00

position 8700
target 5' U UG CGUGACAUU U A U U 3'
UGA GUGGUG UCACU GCA CUAC GA AC
GCU CACUAU GGUGA UGU GAUG CU UG
miRNA 3' C UG U C U 5'

dataset: 1
target: OV054768.1

length: 29851
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 653
target 5' G A C 3'
GAGC UGGUGGCCAU GUUACGG
CUUG ACUAUUGGUG UGAUGCC
miRNA 3' CG C AUG UUUG 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 28573
target 5' A UG UU C 3'
GA GU AU CUACUAC CUA GGAA
CU CA UA GGUGAUG GAU CCUU
miRNA 3' CG UG C UU U G UG 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 17148
target 5' A UU UCUCAU GUUGAU U A 3'
GC GC GCCGCU GCACUAUG GAGA
CG UG UGGUGA UGUGAUGC CUUU
miRNA 3' CU CACUAU G 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 19834
target 5' U GG ACAUU A UGAUC CU A 3'
UG UGUGG GCUGCU AUACUG UGGGA AC
GC GCACU UGGUGA UGUGAU GCCUU UG
miRNA 3' C UU AU 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 776
target 5' C ACUCAU GCU GGAGGGGCAUA UC A 3'
GUGA GCGUGA UAAC CACU CGCUAUG GAU
CGCU UGCACU AUUG GUGA GUGAUGC UUG
miRNA 3' U CU 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -27.6 kcal/mol
p-value: 1.000000e+00

position 25913
target 5' C A CU GAUUGGUGG GAAAA C 3'
UGAAC UGA ACCA UUAUACU AUGGGAAU
GCUUG ACU UGGU GAUGUGA UGCCUUUG
miRNA 3' C C AU 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -27.4 kcal/mol
p-value: 1.000000e+00

position 3519
target 5' U C AUA UAAU C 3'
UGAAU UGAUGAUUAC GCUAC GGA
GCUUG ACUAUUGGUG UGAUG CCU
miRNA 3' C C AUG UUG 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -27.4 kcal/mol
p-value: 1.000000e+00

position 4590
target 5' A ACUCU UACAAU UG U A 3'
UGAA UGU GCCACU GCUAUG AAC
GCUU GCA UGGUGA UGAUGC UUG
miRNA 3' C CUAU UG CU 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5027
length: 31

mfe: -27.3 kcal/mol
p-value: 1.000000e+00

position 335
target 5' C CUCG GUG UU U 3'
GCG ACGUG UAC GCU GGAGAC
CGC UGCAC GUG UGA CCUUUG
miRNA 3' U UAUUG AUG UG 5'

Alpha top 25 tDR-Gly

Version: RNAhybrid 2.2

Command line: /vol/bioapps/bin/RNAhybrid.bin -n 30 -s 3utr_human -b 25 -t
/var/bibiserv2/anonymous/rnahybrid/28/15/33/bibiserv2_2022-06-
28_153336_fkmK8/rnahybrid_input_target_rna_sequences.file -q
/var/bibiserv2/anonymous/rnahybrid/28/15/33/bibiserv2_2022-06-
28_153336_fkmK8/rnahybrid_input_mirna_sequences.file -m 29851

searching

dataset: 1

mde of 5008c: -65.000008

Individual hits

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -35.7 kcal/mol

p-value: 1.000000e+00

position 1486
target 5' A GUUCUCUUAUGUUGG AACAAG UAUUGGGUCCACGU U
3'
GGCUGUGU UUGCCAU UGUGCC GCUAGCGC
UCGAUACG AGUGGUG AUAUGG UGGUUGCG
miRNA 3' G
5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -35.3 kcal/mol
p-value: 1.000000e+00

position 10397
target 5' U UGUUACAAUG U GUGU G 3'
UAGCU GUUCACCA CUG UUACCAAUGU
GUCGA CGAGUGGU GAU GGUGGUUGCG
miRNA 3' UA AU 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -35.2 kcal/mol
p-value: 1.000000e+00

position 17146
target 5' A GUU A 3'
CAGCU UGCUC UCAU GCCGCU GAUGC
GUCGA ACGAG GGUG UGGUGG UUGCG
miRNA 3' U U AUA 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -33.0 kcal/mol
p-value: 1.000000e+00

position 14565
target 5' U A UCUGGUA AUC GAUAA A 3'

		GCUAUGC	CGCUGCU		UAUUACUA	ACGC	
		CGAUACG	GUGGUGA		AUGGUGGU	UGCG	
miRNA	3'	GU	A	U			5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -32.9 kcal/mol
p-value: 1.000000e+00

position 13751

target	5'	A	GAC	G	A	GU	C	3'
		CGGU	AUG	UACCAC	UAUAUCAC	CAACGU		
		GUCG	UAC	GUGGUG	AUAUGGUG	GUUGCG		
miRNA	3'	A	GA					5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -32.7 kcal/mol
p-value: 1.000000e+00

position 17424

target	5'	U	GACCC	AU	UG	CC	A	3'
		GGC	UGCUC	A	UACC	CA	ACGC	
		UCG	ACGAGU	AUGG	GU	UGCG		
miRNA	3'	G	AU	GGUGAU	UG			5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -32.5 kcal/mol
p-value: 1.000000e+00

position 28401

target	5'	U	GUCUUG	CUC	U	A	UG	A	3'
		GC	GUUCACCGCU	AC	CA	CA	GC		
		CG	CGAGUGGUGA	UG	GU	GU	CG		
miRNA	3'	GU	AUA	UA	G	UG			5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -32.4 kcal/mol
p-value: 1.000000e+00

position 29487
target 5' G A G CAACUCAGGCCUAA CAUGCAG A G A 3'
AGC GUGCU ACU ACU ACCAC CAA GC
UCG UACGA UGG UGA UGGUG GUU CG
miRNA 3' G A G UA G 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -32.3 kcal/mol
p-value: 1.000000e+00

position 26688
target 5' U UGUUUU UU AGAAUAAAUUGGAU GG G 3'
UAGCU GUGCUUGCUGCUGU AC CACC UG
GUCGA UACGAGUGGUGAUA UG GUGG GC
miRNA 3' UU G 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -32.3 kcal/mol
p-value: 1.000000e+00

position 24208
target 5' U GCAG G AA UGCU A 3'
GGU GUGCU CAUUAC AUACCAUU AUGC
UCG UACGA GUGGUG UAUGGUGG UGCG
miRNA 3' G A A U 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -32.0 kcal/mol
p-value: 1.000000e+00

position 4679
target 5' C CAGUUUC UUCU UG GUUA A 3'
CAGCUA UGU UCACC AUGCU CAGCGU
GU CGAU ACG AGUGG UAUGG GUUGCG
miRNA 3' UGA UG 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -32.0 kcal/mol
p-value: 1.000000e+00

position 26782
target 5' U CUUCAU UUCAG U UG GU G 3'
CAGCUA UGCUU CU ACUG U CGC ACGC
GU CGAU ACGAG GG UGAU A GUG UGCG
miRNA 3' U UG GU 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -31.8 kcal/mol
p-value: 1.000000e+00

position 16143
target 5' U AUG A UC G A 3'
GUUAUGCUUACUA AUA CACC AA GU
CGAUACGAGUGGU UAU GUGG UU CG
miRNA 3' GU GA G G 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -31.7 kcal/mol
p-value: 1.000000e+00

position 16918
target 5' A A CAUUAAGUG UAC G AAGA A 3'
CAGU AUGC CACC ACUA UGCCAC GC

miRNA 3' GUCG UACG A A GUGG UGAU AUGGUG CG GUUG 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -31.7 kcal/mol
p-value: 1.000000e+00

position 4179
target 5' A GG AAA A 3'
GGCUG GU CACUACUG UGCUAGCG
UCGAU CG GUGGUGAU GUGGUUGC
miRNA 3' G A A AUG G 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -31.6 kcal/mol
p-value: 1.000000e+00

position 1317
target 5' A AAG UGUGGUUACU AA U 3'
AG GUGC CACUACU UACC CCA AUGC
UC UACG GUGGUGA AUGG GGU UGCG
miRNA 3' G GA A U U 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -31.6 kcal/mol
p-value: 1.000000e+00

position 29155
target 5' U C AAA UG AAUU C U 3'
GGC GC U CAC UGCC CCAGCGC
UCG CG G GUG AUGG GGUUGCG
miRNA 3' G AUA A UG AU U 5'

dataset: 1

target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -31.5 kcal/mol
p-value: 1.000000e+00

position 26976
target 5' C UGACAUCAAGGACC CUAAGAAA GUU C G U 3'
GCUG UGC UCACU GCUA AUCAC AACGC
CGAU ACG AGUGG UGAU UGGUG UUGCG
miRNA 3' GU A G 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -31.5 kcal/mol
p-value: 1.000000e+00

position 14780
target 5' U G UA G CGUUAUAAU A 3'
CAGC AU U ACUACUACU CUACCAAC
GUCG UA A UGGUGAUA GGUGGUUG
miRNA 3' A CG G U CG 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -31.4 kcal/mol
p-value: 1.000000e+00

position 16196
target 5' A ACA AGU UAC G U 3'
GGCUAUGU CACCGC AUAC CU A GC
UCGAUACG GUGGUG UAUG GG U CG
miRNA 3' G A A GU U G 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -31.4 kcal/mol

p-value: 1.000000e+00

position 29697

```
target 5'      A      AUUU      G C 3'
             GC CACCAC      UCACCGA GC
             CG GUGGUG      GGUGGUU CG
miRNA  3' GUCGAUA A      AUAU      G 5'
```

dataset: 1

target: OV054768.1

length: 29851

miRNA : 5008c

length: 30

mfe: -31.3 kcal/mol

p-value: 1.000000e+00

position 11107

```
target 5'  U      GGUA      U      UU  A 3'
           GCUAUG      UUAUUGCUAUG CUGCU  UGC
           CGAUAC      AGUGGUGAUAU GGUGG  GCG
miRNA  3' GU      G      UU      5'
```

dataset: 1

target: OV054768.1

length: 29851

miRNA : 5008c

length: 30

mfe: -31.2 kcal/mol

p-value: 1.000000e+00

position 13219

```
target 5'  U  G  A  UGU GU      U  C 3'
           GGU GUGC UCG  U  CUGUACUGCCG UGC
           UCG UACG AGU  G  GAUAUGGUGGU GCG
miRNA  3' G  A      GU      U      5'
```

dataset: 1

target: OV054768.1

length: 29851

miRNA : 5008c

length: 30

mfe: -31.1 kcal/mol

p-value: 1.000000e+00

position 1178

```
target 5'  C      G      AAUGA  A      AUG  C 3'
           CAGU  UGC UCACCA      AUGC ACCAA  UGC
           GUCG  ACG AGUGGU      UAUG UGGUU  GCG
```

miRNA 3' AU GA G 5'

dataset: 1
target: OV054768.1
length: 29851
miRNA : 5008c
length: 30

mfe: -31.1 kcal/mol
p-value: 1.000000e+00

position 2865
target 5' A AAA A UG UG G G U 3'
AGU UG GUUCGCC UGU UG CA AUGC
UCG AU CGAGUGG AUA GU GU UGCG
miRNA 3' G A UG UG G 5'

Delta top 25 tDR-Val

Version: RNAhybrid 2.2
Command line: /vol/bioapps/bin/RNAhybrid.bin -t
/var/bibiserv2/anonymous/rnahybrid/28/15/00/bibiserv2_2022-06-
28_150030_iit5m/rnahybrid_input_target_rna_sequences_.file -s 3utr_human -n
31 -b 25 -m 29836 -q
/var/bibiserv2/anonymous/rnahybrid/28/15/00/bibiserv2_2022-06-
28_150030_iit5m/rnahybrid_input_mirna_sequences.file
searching
dataset: 1
mde of 5027: -64.200005
Individual hits

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -31.0 kcal/mol
p-value: 1.000000e+00

position 6131
target 5' G GAUUAUAA A 3'
GUG AUGUGGUGGCUAUU ACACUAC
CGC UGCACUAUUGGUGA UGUGAUG
miRNA 3' U CCUUUG 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027

length: 31

mfe: -30.0 kcal/mol
p-value: 1.000000e+00

position 6426
target 5' A U A CGAAG UG A 3'
GUG AAUGUGA AACUAC U UA GGAGAC
CGC UUGCACU UUGGUG G AU CCUUUG
miRNA 3' A AU UG G 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -29.9 kcal/mol
p-value: 1.000000e+00

position 29226
target 5' C G U A U C 3'
G GAACGUGG UGACC UACAC GG GC
C CUUGCACU AUUGG AUGUG CC UG
miRNA 3' G UG AUG UU 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -29.6 kcal/mol
p-value: 1.000000e+00

position 12210
target 5' U C CA GCA GUAAGU A 3'
UGA CGUGAUG GCCAU AC UGAAA
GCU GCACUAU UGGUG UG GCCUUU
miRNA 3' C U AUG AU G 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -29.3 kcal/mol
p-value: 1.000000e+00

position 10090

```

target 5'      U      CA      UA      UCUUU      U 3'
              UGUGGUA  ACUACACU  ACGG      GGC
              GCACUAU  UGAUGUGA  UGCC      UUG
miRNA  3' CGCUU      UGG      U      5'

```

```

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

```

```

mfe: -29.2 kcal/mol
p-value: 1.000000e+00

```

```

position 10641
target 5'      U      U      UGUA      UG UAUAA      A 3'
              AGC UGGU      CGCUGC  U      AUGGAGAC
              UUG ACUA      GUGAUG  A      UGCCUUUG
miRNA  3' CGC      C      UUG      UG      5'

```

```

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

```

```

mfe: -29.0 kcal/mol
p-value: 1.000000e+00

```

```

position 1430
target 5' C  A  G      CGC      UU      U 3'
              GU AG GUGGU      ACUAUUGC CU  GGAGGC
              CG UU CACUA      UGGUGAUG GA  CCUUUG
miRNA  3'      C  G      U      U  UG      5'

```

```

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

```

```

mfe: -29.0 kcal/mol
p-value: 1.000000e+00

```

```

position 8753
target 5' A  C      GG AG      AU  CAA  U 3'
              GC AGCGUGGU  U  UUAUACUA  GA  AGC
              CG UUGCACUA  G  GAUGUGAU  CU  UUG
miRNA  3'      C      UU GU      GC      5'

```

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -29.0 kcal/mol
p-value: 1.000000e+00

position 29069
target 5' G A GA AACCCAA U 3'
GC GACGUGGU CCA ACA GGAAAU
CG UUGCACUA GGU UGU CCUUUG
miRNA 3' C UU GA GAUG 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -28.9 kcal/mol
p-value: 1.000000e+00

position 29677
target 5' A U AAG C UUC C C 3'
GGAC UGA AGCCAC ACAUU AC GAGGC
CUUG ACU UUGGUG UGUGA UG CUUUG
miRNA 3' CG C A A C 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -28.7 kcal/mol
p-value: 1.000000e+00

position 6339
target 5' A G A C 3'
G GAAUG GAUAAUC UUGC CUGCG AGAU
C CUUGC CUAUUGG GAUG GAUGC UUUG
miRNA 3' G A U U C 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -28.6 kcal/mol
p-value: 1.000000e+00

position 4131
target 5' C UAU U AAAAAGUCUGGUG U G 3'
UGUGGU ACC ACU GCACUAC GAAAU
GCACUA UGG UGA UGUGAUG CUUUG
miRNA 3' CGCUU U C 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -28.4 kcal/mol
p-value: 1.000000e+00

position 27046
target 5' C UAGCAG CAGGUUUU AUACAGUC A UU A 3'
GC AGCGUG GUGACU GCUGC GCUAC GGA GGC
CG UUGCAC UAUUGG UGAUG UGAUG CCU UUG
miRNA 3' C 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -28.0 kcal/mol
p-value: 1.000000e+00

position 2219
target 5' G AAAU UC UG AA U 3'
GUGGAC UG ACC UGCA GGAAAU
CGCUUG AC UGG AUGU CCUUUG
miRNA 3' C UAU UG GAUG 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -27.8 kcal/mol
p-value: 1.000000e+00

position 8673
target 5' U UG CGUGACAUU U A U U 3'

```
          UGA  GUGGUG UCACU          GCA CUAC GA AC
          GCU  CACUAU GGUGA          UGU GAUG CU UG
miRNA  3' C   UG      U              C   U      5'
```

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 626
target 5' G A C 3'
 GAGC UGGUGGCCAU GUUACGG
 CUUG ACUAUUGGUG UGAUGCC
miRNA 3' CG C AUG UUUG 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 28565
target 5' A UG UU C 3'
 GA GU AU CUACUAC CUA GGAA
 CU CA UA GGUGAUG GAU CCUU
miRNA 3' CG UG C UU U G UG 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 17130
target 5' A UU UCUCAU GUUGAU U A 3'
 GC GC GCCGCU GCACUAUG GAGA
 CG UG UGGUGA UGUGAUGC CUUU
miRNA 3' CU CACUAU G 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 19816
target 5' U GG ACAUU A UGAUC CU A 3'
UG UGUGG GCUGCU AUACUG UGGGA AC
GC GCACU UGGUGA UGUGAU GCCUU UG
miRNA 3' C UU AU 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 749
target 5' C ACUCAU GCU GGAGGGGCAUA UC A 3'
GUGA GCGUGA UAAC CACU CGCUAUG GAU
CGCU UGCACU AUUG GUGA GUGAUGC UUG
miRNA 3' U CU 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -27.6 kcal/mol
p-value: 1.000000e+00

position 25904
target 5' C A CU GAUUGGUGG GAAAA C 3'
UGAAC UGA ACCA UUAUACU AUGGGAAU
GCUUG ACU UGGU GAUGUGA UGCCUUUG
miRNA 3' C C AU 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -27.4 kcal/mol
p-value: 1.000000e+00

position 3492
target 5' U C AUA UAAU C 3'
UGAAU UGAUGAUUAC GCUAC GGA
GCUUG ACUAUUGGUG UGAUG CCU
miRNA 3' C C AUG UUG 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -27.4 kcal/mol
p-value: 1.000000e+00

position 4563
target 5' A ACUCU UACAAU UG U A 3'
UGAA UGU GCCACU GCUAUG AAC
GCUU GCA UGGUGA UGAUGC UUG
miRNA 3' C CUAU UG CU 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -27.3 kcal/mol
p-value: 1.000000e+00

position 308
target 5' C CUCG GUG UU U 3'
GCG ACGUG UAC GCU GGAGAC
CGC UGCAC GUG UGA CCUUUG
miRNA 3' U UAUUG AUG UG 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5027
length: 31

mfe: -27.3 kcal/mol
p-value: 1.000000e+00

position 1911
target 5' C U UUUUACAGAA AACAAU AG U 3'
UG GCGUG GGCCGCUAU ACU AUGGAA

GC UGCAC UUGGUGAUG UGA UGCCUU
miRNA 3' C U UA UG 5'

Delta Top 25 tDR-Gly

ersion: RNAhybrid 2.2

Command line:/vol/bioapps/bin/RNAhybrid.bin -s 3utr_human -m 29836 -t
/var/bibiserv2/anonymous/rnahybrid/28/15/39/bibiserv2_2022-06-
28_153936_UU6f6/rnahybrid_input_target_rna_sequences_.file -n 30 -q
/var/bibiserv2/anonymous/rnahybrid/28/15/39/bibiserv2_2022-06-
28_153936_UU6f6/rnahybrid_input_mirna_sequences.file -b 25

searching

dataset: 1

mde of 5008c: -65.000008

Individual hits

dataset: 1

target: OK091006.1

length: 29836

miRNA : 5008c

length: 30

mfe: -35.7 kcal/mol

p-value: 1.000000e+00

position 1459

target 5' A GUUCUCUUAUGUUGG AACAAG UAUUGGGUCCACGU U
3'

GGCUGUGU UUGCCAU UGUGCC GCUAGCGC
UCGAUACG AGUGGUG AUAUGG UGGUUGCG

miRNA 3' G

5'

dataset: 1

target: OK091006.1

length: 29836

miRNA : 5008c

length: 30

mfe: -35.3 kcal/mol

p-value: 1.000000e+00

position 10370

target 5' U UGUUACAAUG U GUGU G 3'

UAGCU GUUCACCA CUG UUACCAAUGU
GUCGA CGAGUGGU GAU GGUGGUUGCG

miRNA 3' UA

AU

5'

dataset: 1

target: OK091006.1

length: 29836
miRNA : 5008c
length: 30

mfe: -35.2 kcal/mol
p-value: 1.000000e+00

position 17128
target 5' A GUU A 3'
CAGCU UGCUC UCAU GCCGCU GAUGC
GUCCA ACGAG GGUG UGGUGG UUGCG
miRNA 3' U U AUA 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -33.0 kcal/mol
p-value: 1.000000e+00

position 14547
target 5' U A UCUGGUAUAUC GAUAA A 3'
GCUAUGC CGCUGCU UAUUACUA ACGC
CGAUACG GUGGUGA AUGGUGGU UGCG
miRNA 3' GU A U 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -32.9 kcal/mol
p-value: 1.000000e+00

position 13733
target 5' A GAC G A GU C 3'
CGGU AUG UACCAC UAUUACAC CAACGU
GUCC UAC GUGGUG AUAUGGUG GUUGCG
miRNA 3' A GA 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -32.7 kcal/mol
p-value: 1.000000e+00

position 17406
target 5' U GACCC AU UG CC A 3'
GGC UGCUCA UACC CA ACGC
UCG ACGAGU AUGG GU UGCG
miRNA 3' G AU GGUGAU UG 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -32.5 kcal/mol
p-value: 1.000000e+00

position 28393
target 5' U GUCUUG CUC U A UG A 3'
GC GUUCACCGCU AC CA CA GC
CG CGAGUGGUGA UG GU GU CG
miRNA 3' GU AUA UA G UG 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -32.4 kcal/mol
p-value: 1.000000e+00

position 29479
target 5' G A G CAACUCAGGCCUAA CAUGCAG A G A 3'
AGC GUGCU ACU ACU ACCAC CAA GC
UCG UACGA UGG UGA UGGUG GUU CG
miRNA 3' G A G UA G 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -32.3 kcal/mol
p-value: 1.000000e+00

position 26679
target 5' U UGUUUU UU AGAAUAAAUUGGAU GG G 3'
UAGCU GUGCUUGCUGCUGU AC CACC UG
GUCCA UACGAGUGGUGAUA UG GUGG GC
miRNA 3' UU G 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -32.3 kcal/mol
p-value: 1.000000e+00

position 24199
target 5' U GCAG G AA UGCU A 3'
GGU GUGCU CAUAC AUACCAU AUGC
UCG UACGA GUGGUG UAUGGUG UGCG
miRNA 3' G A A U 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -32.0 kcal/mol
p-value: 1.000000e+00

position 4652
target 5' C CAGUUUC UUCU UG GUUA A 3'
CAGCUA UGU UCACC AUGCU CAGCGU
GUUGAU ACG AGUGG UAUGG GUUGCG
miRNA 3' UGA UG 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -32.0 kcal/mol
p-value: 1.000000e+00

position 26773
target 5' U CUUCAU UUCAG U UG GU G 3'
CAGCUA UGCUU CU ACUG U CGC ACGC
GUUGAU ACGAG GG UGAU A GUG UGCG
miRNA 3' U UG GU 5'

dataset: 1
target: OK091006.1
length: 29836

miRNA : 5008c
length: 30

mfe: -31.7 kcal/mol
p-value: 1.000000e+00

position 16900
target 5' A A CAUUAAGUG UAC G AAGA A 3'
CAGU AUGC CACC ACUA UGCCAC GC
GUCG UACG GUGG UGAU AUGGUG CG
miRNA 3' A A GUUG 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -31.6 kcal/mol
p-value: 1.000000e+00

position 1290
target 5' A AAG UGUGGUUACU AA U 3'
AG GUGC CACUACU UACC CCA AUGC
UC UACG GUGGUGA AUGG GGU UGCG
miRNA 3' G GA A U U 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -31.6 kcal/mol
p-value: 1.000000e+00

position 29147
target 5' U C AAA UG AAUU C U 3'
GGC GC U CAC UGCC CCAGCGC
UCG CG G GUG AUGG GGUUGCG
miRNA 3' G AUA A UG AU U 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -31.5 kcal/mol
p-value: 1.000000e+00

position 26967
target 5' C UGACAUCAAGGACC CUAAGAAA GUU C G U 3'
GCUG UGC UCACU GCUA AUCAC AACGC
CGAU ACG AGUGG UGAU UGGUG UUGCG
miRNA 3' GU A G 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -31.5 kcal/mol
p-value: 1.000000e+00

position 14762
target 5' U G UA G CGUUAUAU A 3'
CAGC AU U ACUACUACU CUACCAAC
GUCG UA A UGGUGUAU GGUGGUUG
miRNA 3' A CG G U CG 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -31.4 kcal/mol
p-value: 1.000000e+00

position 16178
target 5' A ACA AGU UAC G U 3'
GGCUAUGU CACCGC AUAC CU A GC
UUGAUACG GUGGUG UAUG GG U CG
miRNA 3' G A A GU U G 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -31.4 kcal/mol
p-value: 1.000000e+00

position 29689
target 5' A AUUU G C 3'
GC CACCAC UCACCGA GC
CG GUGGUG GGUGGUU CG
miRNA 3' GUUGUAU A AUAU G 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -31.3 kcal/mol
p-value: 1.000000e+00

position 11080
target 5' U GGUA U UU A 3'
GCUAUG UUAUUGCUAUG CUGCU UGC
CGAUAC AGUGGUGAUAU GGUGG GCG
miRNA 3' GU G UU 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -31.2 kcal/mol
p-value: 1.000000e+00

position 13201
target 5' U G A UGU GU U C 3'
GGU GUGC UCG U CUGUACUGCCG UGC
UCG UACG AGU G GAUAUGGUGGU GCG
miRNA 3' G A GU U 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c
length: 30

mfe: -31.1 kcal/mol
p-value: 1.000000e+00

position 1151
target 5' C G AAUGA A AUG C 3'
CAGU UGC UCACCA AUGC ACCAA UGC
GUCG ACG AGUGGU UAUG UGGUU GCG
miRNA 3' AU GA G 5'

dataset: 1
target: OK091006.1
length: 29836
miRNA : 5008c

length: 30

mfe: -31.1 kcal/mol

p-value: 1.000000e+00

position 2838

```
target 5' A   AAA   A           UG   UG   G   G       U 3'
          AGU   UG GUUCGCC   UGU   UG CA AUGC
          UCG   AU CGAGUGG   AUA   GU GU UGCG
miRNA  3' G           A           UG   UG   G           5'
```

dataset: 1

target: OK091006.1

length: 29836

miRNA : 5008c

length: 30

mfe: -30.9 kcal/mol

p-value: 1.000000e+00

position 18206

```
target 5' A   A   G           ACAUGUU           C   A 3'
          AGUU AUG UUACC CUA           UAUCACC GCG
          UCGA UAC AGUGG GAU           AUGGUGG UGC
miRNA  3' G           G           U           U   G 5'
```

dataset: 1

target: OK091006.1

length: 29836

miRNA : 5008c

length: 30

mfe: -30.9 kcal/mol

p-value: 1.000000e+00

position 25226

```
target 5' A   A           UG UG   G   G       U 3'
          CA UUAUGCUU   C   UAU ACCA U   UGC
          GU GAUACGAG   G   AUA UGGU G   GCG
miRNA  3'   C           UG UG           G UU       5'
```

BA.1 top 25 with tDR-Val

Version: RNAhybrid 2.2

Command line: /vol/bioapps/bin/RNAhybrid.bin -n 31 -m 29684 -b 25 -s
3utr_human -q /var/bibiserv2/anonymous/rnahybrid/28/15/23/bibiserv2_2022-06-
28_152328_Bgqvyrnahybrid_input_mirna_sequences.file -t
/var/bibiserv2/anonymous/rnahybrid/28/15/23/bibiserv2_2022-06-
28_152328_Bgqvyrnahybrid_input_target_rna_sequences_.file

searching
dataset: 1
mde of 5027: -64.200005
Individual hits

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -31.0 kcal/mol
p-value: 1.000000e+00

position 6104
target 5' G GAUUAUAA A 3'
GUG AUGUGGUGGCUAUU ACACUAC
CGC UGCACUAUUGGUGA UGUGAUG
miRNA 3' U CCUUUG 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -30.9 kcal/mol
p-value: 1.000000e+00

position 29620
target 5' A U AAG C UUCACCGAGGCCAC U G 3'
GGAC UGA AGCCAC ACAUU GCGGAG AC
CUUG ACU UUGGUG UGUGA UGCCUU UG
miRNA 3' CG C A A 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -30.5 kcal/mol
p-value: 1.000000e+00

position 5453
target 5' U UGUAAA UG G A A C A 3'
UGAACGUGGUG ACU UG AC AC G AGAC
GCUUGCACUAU UGG AU UG UG C UUUG
miRNA 3' C UG G A C 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -30.0 kcal/mol
p-value: 1.000000e+00

position 6399
target 5' A U A CGAAG UG A 3'
GUG AAUGUGA AACUAC U UA GGAGAC
CGC UUGCACU UUGGUG G AU CCUUUG
miRNA 3' A AU UG G 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -29.9 kcal/mol
p-value: 1.000000e+00

position 29169
target 5' C G U A U C 3'
G GAACGUGG UGACC UACAC GG GC
C CUUGCACU AUUGG AUGUG CC UG
miRNA 3' G UG AUG UU 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -29.6 kcal/mol
p-value: 1.000000e+00

position 12171
target 5' U C CA GCA GUAAGU A 3'
UGA CGUGAUG GCCAU AC UGGAAA
GCU GCACUAU UGGUG UG GCCUUU
miRNA 3' C U AUG AU G 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -29.3 kcal/mol
p-value: 1.000000e+00

position 10060
target 5' U CA UA UCUUU U 3'
UGUGGUA ACUACACU ACGG GGC
GCACUAU UGAUGUGA UGCC UUG
miRNA 3' CGCUU UGG U 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -29.2 kcal/mol
p-value: 1.000000e+00

position 10611
target 5' U U UGUA UG UAUAA A 3'
AGC UGGU CGCUGC U AUGGAGAC
UUG ACUA GUGAUG A UGCCUUUG
miRNA 3' CGC C UUG UG 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -29.0 kcal/mol
p-value: 1.000000e+00

position 1403
target 5' C A G CGC UU U 3'
GU AG GUGGU ACUAUUGC CU GGAGGC
CG UU CACUA UGGUGAUG GA CCUUUG
miRNA 3' C G U U UG 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -29.0 kcal/mol
p-value: 1.000000e+00

position 8723
target 5' A C GG AG AU CAA U 3'
GC AGCGUGGU U UUAUACUA GA AGC

miRNA 3' CG UUGCACUA G GAUGUGAU CU UUG 5'
C UU GU GC

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -29.0 kcal/mol
p-value: 1.000000e+00

position 29012
target 5' G A GA AACCCAA U 3'
GC GACGUGGU CCA ACA GGAAAU
CG UUGCACUA GGU UGU CCUUUG
miRNA 3' C UU GA GAUG 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -28.7 kcal/mol
p-value: 1.000000e+00

position 6312
target 5' A G A C 3'
G GAAUG GAUAAUC UUGC CUGCG AGAU
C CUUGC CUAUUGG GAUG GAUGC UUUG
miRNA 3' G A U U C 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -28.6 kcal/mol
p-value: 1.000000e+00

position 4104
target 5' C UAU U AAAAAGGCUGGUG U G 3'
UGUGGU ACC ACU GCACUAC GAAAU
GCACUA UGG UGA UGUGAUG CUUUG
miRNA 3' CGCUU U C 5'

dataset: 1

target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -28.4 kcal/mol
p-value: 1.000000e+00

position 26998
target 5' C UAGCAG CAGGUUUU AUACAGUC A UU A 3'
GC AGCGUG GUGACU GCUGC GCUAC GGA GGC
CG UUGCAC UAUUGG UGAUG UGAUG CCU UUG
miRNA 3' C 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -28.0 kcal/mol
p-value: 1.000000e+00

position 2192
target 5' G AAAU UC UG AA U 3'
GUGGAC UG ACC UGCA GGAAAU
CGCUUG AC UGG AUGU CCUUUG
miRNA 3' C UAU UG GAUG 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -27.8 kcal/mol
p-value: 1.000000e+00

position 8643
target 5' U UG CGUGACAUU U A U U 3'
UGA GUGGUG UCACU GCA CUAC GA AC
GCU CACUAU GGUGA UGU GAUG CU UG
miRNA 3' C UG U C U 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol

p-value: 1.000000e+00

position 599

```
target 5' G          A          C          3'
          GAGC UGGUGGCCAU GUUACGG
          CUUG ACUAUUGGUG UGAUGCC
miRNA 3' CG      C          AUG          UUUG 5'
```

dataset: 1

target: OL672836.1

length: 29684

miRNA : 5027

length: 31

mfe: -27.7 kcal/mol

p-value: 1.000000e+00

position 28508

```
target 5' A  UG      UU          C  3'
          GA  GU AU  CUACUAC CUA GGAA
          CU  CA UA  GGUGAUG GAU CCUU
miRNA 3' CG  UG  C  UU          U  G      UG 5'
```

dataset: 1

target: OL672836.1

length: 29684

miRNA : 5027

length: 31

mfe: -27.7 kcal/mol

p-value: 1.000000e+00

position 17091

```
target 5' A  UU  UCUCAU      GUUGAU      U      A  3'
          GC  GC      GCCGCU      GCACUAUG GAGA
          CG  UG      UGGUGA      UGUGAUGC CUUU
miRNA 3'      CU  CACUAU          G  5'
```

dataset: 1

target: OL672836.1

length: 29684

miRNA : 5027

length: 31

mfe: -27.7 kcal/mol

p-value: 1.000000e+00

position 19777

```
target 5' U  GG      ACAUU      A      UGAUC      CU  A  3'
          UG  UGUGG      GCUGCU AUACUG      UGGGA  AC
          GC  GCACU      UGGUGA UGUGAU      GCCUU  UG
```

miRNA 3' C UU AU 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 722
target 5' C ACUCAU GCU GGAGGGGCAUA UC A 3'
GUGA GCGUGA UAAC CACU CGCUAUG GAU
CGCU UGCACU AUUG GUGA GUGAUGC UUG
miRNA 3' U CU 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -27.6 kcal/mol
p-value: 1.000000e+00

position 25856
target 5' C A CU GAUUGGUGG GAAAA C 3'
UGAAC UGA ACCA UUAUACU AUGGGAAU
GCUUG ACU UGGU GAUGUGA UGCCUUUG
miRNA 3' C C AU 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -27.4 kcal/mol
p-value: 1.000000e+00

position 3465
target 5' U C AUA UAAU C 3'
UGAAU UGAUGAUUAC GCUAC GGA
GCUUG ACUAUUGGUG UGAUG CCU
miRNA 3' C C AUG UUG 5'

dataset: 1
target: OL672836.1

length: 29684
miRNA : 5027
length: 31

mfe: -27.4 kcal/mol
p-value: 1.000000e+00

position 4536
target 5' A ACUCU UACAAU UG U A 3'
UGAA UGU GCCACU GCUAUG AAC
GCUU GCA UGGUGA UGAUGC UUG
miRNA 3' C CUAU UG CU 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5027
length: 31

mfe: -27.3 kcal/mol
p-value: 1.000000e+00

position 281
target 5' C CUCG GUG UU U 3'
GCG ACGUG UAC GCU GGAGAC
CGC UGCAC GUG UGA CCUUUG
miRNA 3' U UAUUG AUG UG 5'

BA.1 top 25 with tDR-Gly

Version: RNAhybrid 2.2

Command line: /vol/bioapps/bin/RNAhybrid.bin -n 30 -b 25 -m 29684 -q
/var/bibiserv2/anonymous/rnahybrid/28/15/27/bibiserv2_2022-06-
28_152716_cgBUf/rnahybrid_input_mirna_sequences.file -s 3utr_human -t
/var/bibiserv2/anonymous/rnahybrid/28/15/27/bibiserv2_2022-06-
28_152716_cgBUf/rnahybrid_input_target_rna_sequences_.file
searching

dataset: 1
mde of 5008c: -65.000008
Individual hits

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -35.7 kcal/mol
p-value: 1.000000e+00

position 1432

target 5' A	GUUCUCUUAUGUUGG	AACAAG	UAUUGGGUCCACGU	U
3'				
	GGCUGUGU	UUGCCAU	UGUGCC	GCUAGCGC
	UCGAUACG	AGUGGUG	AUAUGG	UGGUUGCG
miRNA 3' G				
5'				

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -35.3 kcal/mol
p-value: 1.000000e+00

position 10340

target 5' U	UGUUACAAUG	U	GUGU	G 3'
	UAGCU	GUUCACCA	CUG	UUACCAAUGU
	GUCGA	CGAGUGGU	GAU	GGUGGUUGCG
miRNA 3'	UA		AU	5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -35.2 kcal/mol
p-value: 1.000000e+00

position 17089

target 5' A		GUU	A 3'
	CAGCU	UGCUC	UCAU
	GCCGCU	GAUGC	
	GUCGA	ACGAG	GGUG
	UGGUGG	UUGCG	
miRNA 3'	U	U	AUA
			5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -33.0 kcal/mol
p-value: 1.000000e+00

position 14508

target 5' U	A	UCUGGUAUUC	GAUAA	A 3'
	GCUAUGC	CGCUGCU	UAUUACUA	ACGC
	CGAUACG	GUGGUGA	AUGGUGGU	UGCG
miRNA 3' GU	A	U		5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -32.9 kcal/mol
p-value: 1.000000e+00

position 13694
target 5' A GAC G A GU C 3'
CGGU AUG UACCAC UAUUACAC CAACGU
GUCG UAC GUGGUG AUAUGGUG GUUGCG
miRNA 3' A GA 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -32.7 kcal/mol
p-value: 1.000000e+00

position 17367
target 5' U GACCC AU UG CC A 3'
GGC UGCUCA UACC CA ACGC
UCG ACGAGU AUGG GU UGCG
miRNA 3' G AU GGUGAU UG 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -32.5 kcal/mol
p-value: 1.000000e+00

position 28336
target 5' U GUCUUG CUC U A UG A 3'
GC GUUCACCGCU AC CA CA GC
CG CGAGUGGUGA UG GU GU CG
miRNA 3' GU AUA UA G UG 5'

dataset: 1
target: OL672836.1
length: 29684

miRNA : 5008c
length: 30

mfe: -32.4 kcal/mol
p-value: 1.000000e+00

position 29422
target 5' G A G CAACUCAGGCCUAA CAUGCAG A G A 3'
AGC GUGCU ACU ACU ACCAC CAA GC
UCG UACGA UGG UGA UGGUG GUU CG
miRNA 3' G A G UA G 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -32.3 kcal/mol
p-value: 1.000000e+00

position 24151
target 5' U GCAG G AA UGCU A 3'
GGU GUGCU CAUAC AUACCAUU AUGC
UCG UACGA GUGGUG UAUGGUGG UGCG
miRNA 3' G A A U 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -32.0 kcal/mol
p-value: 1.000000e+00

position 4625
target 5' C CAGUUUC UUCU UG GUUA A 3'
CAGCUA UGU UCACC AUGCU CAGCGU
GUCGAU ACG AGUGG UAUGG GUUGCG
miRNA 3' UGA UG 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -32.0 kcal/mol
p-value: 1.000000e+00

position 26725
target 5' U CUUCAU UUCAG U UG GU G 3'
CAGCUA UGCUU CU ACUG U CGC ACGC
GU CGAU ACGAG GG UGAU A GUG UGCG
miRNA 3' U UG GU 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -31.7 kcal/mol
p-value: 1.000000e+00

position 16861
target 5' A A CAUUAAGUG UAC G AAGA A 3'
CAGU AUGC CACC ACUA UGCCAC GC
GUCG UACG GUGG UGAU AUGGUG CG
miRNA 3' A A GUUG 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -31.7 kcal/mol
p-value: 1.000000e+00

position 4125
target 5' A GG AAA A 3'
GGCUG GU CACUACUG UGCUAGCG
UCGAU CG GUGGUGAU GUGGUUGC
miRNA 3' G A A AUG G 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -31.6 kcal/mol
p-value: 1.000000e+00

position 1263
target 5' A AAG UGUGGUUACU AA U 3'
AG GUGC CACUACU UACC CCA AUGC
UC UACG GUGGUGA AUGG GGU UGCG
miRNA 3' G GA A U U 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -31.6 kcal/mol
p-value: 1.000000e+00

position 29090
target 5' U C AAA UG AAUU C U 3'
GGC GC U CAC UGCC CCAGCGC
UCG CG G GUG AUGG GGUUGCG
miRNA 3' G AUA A UG AU U 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -31.5 kcal/mol
p-value: 1.000000e+00

position 26919
target 5' C UGACAUCAAGGACC CUAAGAAA GUU C G U 3'
GCUG UGC UCACU GCUA AUCAC AACGC
CGAU ACG AGUGG UGAU UGGUG UUGCG
miRNA 3' GU A G 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -31.5 kcal/mol
p-value: 1.000000e+00

position 14723
target 5' U G UA G CGUUAUAAU A 3'
CAGC AU U ACUACUAU CUACCAAC
GUCG UA A UGGUGAUA GGUGGUUG
miRNA 3' A CG G U CG 5'

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c

length: 30

mfe: -31.4 kcal/mol
p-value: 1.000000e+00

position 16139

```
target 5' A          ACA          AGU  UAC  G  U 3'
          GGCUAUGU  CACCGC AUAC  CU  A GC
          UCGAUACG  GUGGUG UAUG  GG  U CG
miRNA  3' G          A          A  GU  U  G  5'
```

dataset: 1

target: OL672836.1

length: 29684

miRNA : 5008c

length: 30

mfe: -31.4 kcal/mol
p-value: 1.000000e+00

position 29632

```
target 5'          A          AUUU          G  C 3'
          GC CACCAC  UCACCGA GC
          CG GUGGUG  GGUGGUU CG
miRNA  3' GUCAUA  A          AUAU          G  5'
```

dataset: 1

target: OL672836.1

length: 29684

miRNA : 5008c

length: 30

mfe: -31.3 kcal/mol
p-value: 1.000000e+00

position 11050

```
target 5' U          GGUA          U          UU  A 3'
          GCUAUG  UUAUUGCUAUG CUGCU  UGC
          CGAUAC  AGUGGUGAUAU GGUGG  GCG
miRNA  3' GU          G          UU          5'
```

dataset: 1

target: OL672836.1

length: 29684

miRNA : 5008c

length: 30

mfe: -31.2 kcal/mol
p-value: 1.000000e+00

position 13162

```
target 5' U   G   A   UGU GU           U   C 3'
          GGU GUGC UCG   U   CUGUACUGCCG UGC
          UCG UACG AGU   G   GAUAUGGUGGU GCG
miRNA  3' G   A           GU           U   5'
```

```
dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30
```

```
mfe: -31.1 kcal/mol
p-value: 1.000000e+00
```

```
position 1124
target 5' C           G       AAUGA   A       AUG   C 3'
          CAGU  UGC UCACCA       AUGC ACCAA   UGC
          GUCC  ACG AGUGGU       UAUG UGGUU   GCG
miRNA  3'           AU           GA           G           5'
```

```
dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30
```

```
mfe: -31.1 kcal/mol
p-value: 1.000000e+00
```

```
position 2811
target 5' A   AAA  A           UG   UG  G  G   U 3'
          AGU   UG GUUCGCC  UGU  UG CA AUGC
          UCG   AU CGAGUGG  AUA  GU GU UGCG
miRNA  3' G           A           UG   UG  G           5'
```

```
dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30
```

```
mfe: -30.9 kcal/mol
p-value: 1.000000e+00
```

```
position 18167
target 5' A   A   G       ACAUGUU       C   A 3'
          AGUU AUG UUACC CUA       UAUCACC GCG
          UCGA UAC AGUGG GAU       AUGGUGG UGC
miRNA  3' G           G   U           U   G 5'
```

```

dataset: 1
target: OL672836.1
length: 29684
miRNA : 5008c
length: 30

mfe: -30.9 kcal/mol
p-value: 1.000000e+00

position 25178
target 5' A A UG UG G G U 3'
        CA UUAUGCUU C UAU ACCA U UGC
        GU GAUACGAG G AUA UGGU G GCG
miRNA 3' C UG UG G UU 5'

```

BA.2 top 25 for tDR-Val

```

Version: RNAhybrid 2.2
Command line:/vol/bioapps/bin/RNAhybrid.bin -t
/var/bibiserv2/anonymous/rnahybrid/28/15/12/bibiserv2_2022-06-
28_151239_34y4j/rnahybrid_input_target_rna_sequences_.file -m 29780 -n 31 -b
25 -s 3utr_human -q
/var/bibiserv2/anonymous/rnahybrid/28/15/12/bibiserv2_2022-06-
28_151239_34y4j/rnahybrid_input_mirna_sequences.file
searching
dataset: 1
mde of 5027: -64.200005
Individual hits

```

```

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -31.0 kcal/mol
p-value: 1.000000e+00

position 6133
target 5' G GAUUAUAA A 3'
        GUG AUGUGGUGGCUAUU ACACUAC
        CGC UGCACUAUUGGUGA UGUGAUG
miRNA 3' U CCUUUG 5'

```

```

dataset: 1
target: ON024493.1
length: 29780

```

miRNA : 5027
length: 31

mfe: -30.5 kcal/mol
p-value: 1.000000e+00

position 5482
target 5' U UGUA AAA UG G A A C A 3'
UGAACGUGGUG ACU UG AC AC G AGAC
GCUUGCACUAU UGG AU UG UG C UUUG
miRNA 3' C UG G A C 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -30.0 kcal/mol
p-value: 1.000000e+00

position 6428
target 5' A U A CGAAG UG A 3'
GUG AAUGUGA AACUAC U UA GGAGAC
CGC UUGCACU UUGGUG G AU CCUUUG
miRNA 3' A AU UG G 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -29.9 kcal/mol
p-value: 1.000000e+00

position 29210
target 5' C G U A U C 3'
G GAACGUGG UGACC UACAC GG GC
C CUUGCACU AUUGG AUGUG CC UG
miRNA 3' G UG AUG UU 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -29.6 kcal/mol
p-value: 1.000000e+00

position 12203
target 5' U C CA GCA GUAAGU A 3'
UGA CGUGAUG GCCAU AC UGGAAA
GCU GCACUAU UGGUG UG GCCUUU
miRNA 3' C U AUG AU G 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -29.3 kcal/mol
p-value: 1.000000e+00

position 10092
target 5' U CA UA UCUUU U 3'
UGUGGUA ACUACACU ACGG GGC
GCACUAU UGAUGUGA UGCC UUG
miRNA 3' CGCUU UGG U 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -29.2 kcal/mol
p-value: 1.000000e+00

position 10643
target 5' U U UGUA UG UAUAA A 3'
AGC UGGU CGCUGC U AUGGAGAC
UUG ACUA GUGAUG A UGCCUUUG
miRNA 3' CGC C UUG UG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -29.0 kcal/mol
p-value: 1.000000e+00

position 1432
target 5' C A G CGC UU U 3'
GU AG GUGGU ACUAUUGC CU GGAGGC
CG UU CACUA UGGUGAUG GA CCUUUG
miRNA 3' C G U U UG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -29.0 kcal/mol
p-value: 1.000000e+00

position 8755
target 5' A C GG AG AU CAA U 3'
GC AGCGUGGU U UUAUACUA GA AGC
CG UUGCACUA G GAUGUGAU CU UUG
miRNA 3' C UU GU GC 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -29.0 kcal/mol
p-value: 1.000000e+00

position 29053
target 5' G A GA AACCCAA U 3'
GC GACGUGGU CCA ACA GGAAAU
CG UUGCACUA GGU UGU CCUUUG
miRNA 3' C UU GA GAUG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -28.8 kcal/mol
p-value: 1.000000e+00

position 628
target 5' G A G C 3'
GAGC UGGUGGCCAU G UACGG
CUUG ACUAUUGGUG U AUGCC
miRNA 3' CG C AUG G UUUG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027

length: 31

mfe: -28.7 kcal/mol
p-value: 1.000000e+00

position 6341
target 5' A G A C 3'
G GAAUG GAUAAUC UUGC CUGCG AGAU
C CUUGC CUAUUGG GAUG GAUGC UUUG
miRNA 3' G A U U C 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -28.6 kcal/mol
p-value: 1.000000e+00

position 4133
target 5' C UAU U AAAAAGGCUAGUG U G 3'
UGUGGU ACC ACU GCACUAC GAAAU
GCACUA UGG UGA UGUGAUG CUUUG
miRNA 3' CGCUU U C 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -28.4 kcal/mol
p-value: 1.000000e+00

position 27030
target 5' C UAGCAG CAGGUUUU AUACAGUC A UU A 3'
GC AGCGUG GUGACU GCUGC GCUAC GGA GGC
CG UUGCAC UAUUGG UGAUG UGAUG CCU UUG
miRNA 3' C 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -28.0 kcal/mol
p-value: 1.000000e+00

position 2221

```
target 5' G      AAAU UC      UG      AA      U 3'
          GUGGAC      UG      ACC      UGCA      GGAAAU
          CGCUUG      AC      UGG      AUGU      CCUUUG
miRNA 3'      C      UAU      UG      GAUG      5'
```

```
dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31
```

```
mfe: -27.8 kcal/mol
p-value: 1.000000e+00
```

```
position 8675
target 5' U      UG      CGUGACAUU      U      A      U      U 3'
          UGA      GUGGUG      UCACU      GCA      CUAC      GA      AC
          GCU      CACUAU      GGUGA      UGU      GAUG      CU      UG
miRNA 3' C      UG      U      C      U      5'
```

```
dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31
```

```
mfe: -27.7 kcal/mol
p-value: 1.000000e+00
```

```
position 28549
target 5' A      UG      UU      C 3'
          GA      GU      AU      CUACUAC      CUA      GGAA
          CU      CA      UA      GGUGAUG      GAU      CCUU
miRNA 3' CG      UG      C      UU      U      G      UG 5'
```

```
dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31
```

```
mfe: -27.7 kcal/mol
p-value: 1.000000e+00
```

```
position 17123
target 5' A      UU      UCUCAU      GUUGAU      U      A 3'
          GC      GC      GCCGCU      GCACUAUG      GAGA
          CG      UG      UGGUGA      UGUGAUGC      CUUU
miRNA 3'      CU      CACUAU      G 5'
```

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 19809
target 5' U GG ACAUU A UGAUC CU A 3'
UG UGUGG GCUGCU AUACUG UGGGA AC
GC GCACU UGGUGA UGUGAU GCCUU UG
miRNA 3' C UU AU 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -27.7 kcal/mol
p-value: 1.000000e+00

position 751
target 5' C ACUCAU GCU GGAGGGGCAUA UC A 3'
GUGA GCGUGA UAAC CACU CGCUAUG GAU
CGCU UGCACU AUUG GUGA GUGAUGC UUG
miRNA 3' U CU 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -27.6 kcal/mol
p-value: 1.000000e+00

position 25888
target 5' C A CU GAUUGGUGG GAAAA C 3'
UGAAC UGA ACCA UUAUACU AUGGGAAU
GCUUG ACU UGGU GAUGUGA UGCCUUUG
miRNA 3' C C AU 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -27.4 kcal/mol
p-value: 1.000000e+00

position 3494
target 5' U C AUA UAAU C 3'
UGAAU UGAUGAUUAC GCUAC GGA
GCUUG ACUAUUGGUG UGAUG CCU
miRNA 3' C C AUG UUG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -27.4 kcal/mol
p-value: 1.000000e+00

position 29661
target 5' A U AAG CACAUUUUCACC AGUGAACAAU G G 3'
GGAC UGA AGCCAC UAC GCUA GGAGA
CUUG ACU UUGGUG AUG UGAU CCUUU
miRNA 3' CG C A G G 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -27.4 kcal/mol
p-value: 1.000000e+00

position 4565
target 5' A ACUCU UACAAU UG U A 3'
UGAA UGU GCCACU GCUAUG AAC
GCUU GCA UGGUGA UGAUGC UUG
miRNA 3' C CUAU UG CU 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5027
length: 31

mfe: -27.3 kcal/mol
p-value: 1.000000e+00

position 310
target 5' C CUCG GUG UU U 3'

```

          GCG ACGUG      UAC   GCU  GGAGAC
          CGC UGCAC      GUG   UGA  CCUUUG
miRNA  3'      U      UAUUG
AUG    UG          5'

```

Top 50 for BA.2 tDR-Gly

Version: RNAhybrid 2.2

Command line: /vol/bioapps/bin/RNAhybrid.bin -t

/var/bibiserv2/anonymous/rnahybrid/28/15/51/bibiserv2_2022-06-

28_155132_ofCoo/rnahybrid_input_target_rna_sequences_.file -s 3utr_human -b

50 -q /var/bibiserv2/anonymous/rnahybrid/28/15/51/bibiserv2_2022-06-

28_155132_ofCoo/rnahybrid_input_mirna_sequences.file -n 30 -m 29780

searching

dataset: 1

mde of 5008c: -65.000008

Individual hits

dataset: 1

target: ON024493.1

length: 29780

miRNA : 5008c

length: 30

mfe: -35.7 kcal/mol

p-value: 1.000000e+00

position 1461

```

target 5' A          GUUCUCUUAUGUUGG          AACAAG          UAUUGGGUCCACGU          U
3'

```

```

          GGCUGUGU          UUGCCAU          UGUGCC          GCUAGCGC
          UCGAUACG          AGUGGUG          AUAUGG          UGGUUGCG

```

miRNA 3' G

5'

dataset: 1

target: ON024493.1

length: 29780

miRNA : 5008c

length: 30

mfe: -35.3 kcal/mol

p-value: 1.000000e+00

position 10372

```

target 5' U          UGUUACAAUG          U          GUGU          G 3'

```

```

          UAGCU          GUUCACCA CUG          UUACCAAUGU
          GUCGA          CGAGUGGU GAU          GGUGGUUGCG

```

miRNA 3'

UA

AU

5'

dataset: 1

target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -35.2 kcal/mol
p-value: 1.000000e+00

position 17121
target 5' A GUU A 3'
CAGCU UGCUC UCAU GCCGCU GAUGC
GUCCA ACGAG GGUG UGGUGG UUGCG
miRNA 3' U U AUA 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -33.0 kcal/mol
p-value: 1.000000e+00

position 14540
target 5' U A UCUGGUAUAUC GAUAA A 3'
GCUAUGC CGCUGCU UAUUACUA ACGC
CGAUACG GUGGUGA AUGGUGGU UGCG
miRNA 3' GU A U 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -32.9 kcal/mol
p-value: 1.000000e+00

position 13726
target 5' A GAC G A GU C 3'
CGGU AUG UACCAC UAUUACAC CAACGU
GUCC UAC GUGGUG AUAUGGUG GUUGCG
miRNA 3' A GA 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -32.7 kcal/mol

p-value: 1.000000e+00

position 17399

```
target 5' U   GACCC   AU           UG  CC   A 3'
          GGC      UGCUCA   UACC  CA  ACGC
          UCG      ACGAGU   AUGG  GU  UGCG
miRNA  3' G   AU           GGUGAU   UG           5'
```

dataset: 1

target: ON024493.1

length: 29780

miRNA : 5008c

length: 30

mfe: -32.5 kcal/mol

p-value: 1.000000e+00

position 28377

```
target 5' U   GUCUUG           CUC  U  A  UG  A 3'
          GC      GUUCACCGCU   AC  CA  CA  GC
          CG      CGAGUGGUGA   UG  GU  GU  CG
miRNA  3' GU  AUA           UA           G  UG           5'
```

dataset: 1

target: ON024493.1

length: 29780

miRNA : 5008c

length: 30

mfe: -32.4 kcal/mol

p-value: 1.000000e+00

position 29463

```
target 5' G   C   G   CAACUCAGGCCUAA   CAUGCAG   A   G   A 3'
          AGC  GUGCU  ACU           ACU           ACCAC  CAA  GC
          UCG  UACGA  UGG           UGA           UGGUG  GUU  CG
miRNA  3' G   A   G           UA           G           5'
```

dataset: 1

target: ON024493.1

length: 29780

miRNA : 5008c

length: 30

mfe: -32.3 kcal/mol

p-value: 1.000000e+00

position 24183

```
target 5' U   GCAG   G   AA           UGCU   A 3'
          GGU      GUGCU  CAUUAC  AUACCAUU  AUGC
          UCG      UACGA  GUGGUG  UAUGGUGG  UGCG
```

miRNA 3' G A A U 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -32.0 kcal/mol
p-value: 1.000000e+00

position 4654
target 5' C CAGUUUC UUCU UG GUUA A 3'
CAGCUA UGU UCACC AUGCU CAGCGU
GUUGAU ACG AGUGG UAUGG GUUGCG
miRNA 3' UGA UG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -32.0 kcal/mol
p-value: 1.000000e+00

position 4154
target 5' A GG AAA A 3'
GGCUA GU CACUACUG UGCUAGCG
UCGAU CG GUGGUGAU GUGGUUGC
miRNA 3' G A A AUG G 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -32.0 kcal/mol
p-value: 1.000000e+00

position 26757
target 5' U CUUCAU UUCAG U UG GU G 3'
CAGCUA UGCUU CU ACUG U CGC ACGC
GUUGAU ACGAG GG UGAU A GUG UGCG
miRNA 3' U UG GU 5'

dataset: 1
target: ON024493.1

length: 29780
miRNA : 5008c
length: 30

mfe: -31.7 kcal/mol
p-value: 1.000000e+00

position 16893
target 5' A A CAUUAAGUG UAC G AAGA A 3'
CAGU AUGC CACC ACUA UGCCAC GC
GU CG UACG GUGG UGAU AUGGUG CG
miRNA 3' A A GUUG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -31.6 kcal/mol
p-value: 1.000000e+00

position 1292
target 5' A AAG UGUGGUUACU AA U 3'
AG GUGC CACUACU UACC CCA AUGC
UC UACG GUGGUGA AUGG GGU UGCG
miRNA 3' G GA A U U 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -31.6 kcal/mol
p-value: 1.000000e+00

position 29131
target 5' U C AAA UG AAUU C U 3'
GGC GC U CAC UGCC CCAGCGC
UCG CG G GUG AUGG GGUUGCG
miRNA 3' G AUA A UG AU U 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -31.5 kcal/mol
p-value: 1.000000e+00

position 26951
target 5' C UGACAUCAAGGACC CUAAGAAA GUU C G U 3'
GCUG UGC UCACU GCUA AUCAC AACGC
CGAU ACG AGUGG UGAU UGGUG UUGCG
miRNA 3' GU A G 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -31.5 kcal/mol
p-value: 1.000000e+00

position 14755
target 5' U G UA G CGUUAUAAU A 3'
CAGC AU U ACUACUAU CUACCAAC
GUCG UA A UGGUGAUA GGUGGUUG
miRNA 3' A CG G U CG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -31.4 kcal/mol
p-value: 1.000000e+00

position 16171
target 5' A ACA AGU UAC G U 3'
GGCUAUGU CACCGC AUAC CU A GC
UCGAUACG GUGGUG UAUG GG U CG
miRNA 3' G A A GU U G 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -31.3 kcal/mol
p-value: 1.000000e+00

position 11082
target 5' U GGUA U UU A 3'
GCUAUG UUAUUGCUAUG CUGCU UGC
CGAUAC AGUGGUGAUAU GGUGG GCG
miRNA 3' GU G UU 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -31.2 kcal/mol
p-value: 1.000000e+00

position 13194
target 5' U G A UGU GU U C 3'
GGU GUGC UCG U CUGUACUGCCG UGC
UCG UACG AGU G GAUAUGGUGGU GCG
miRNA 3' G A GU U 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -31.1 kcal/mol
p-value: 1.000000e+00

position 1153
target 5' C G AAUGA A AUG C 3'
CAGU UGC UCACCA AUGC ACCAA UGC
GUCG ACG AGUGGU UAUG UGGUU GCG
miRNA 3' AU GA G 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -31.1 kcal/mol
p-value: 1.000000e+00

position 2840
target 5' A AAA A UG UG G G U 3'
AGU UG GUUCGCC UGU UG CA AUGC
UCG AU CGAGUGG AUA GU GU UGCG
miRNA 3' G A UG UG G 5'

dataset: 1
target: ON024493.1
length: 29780

miRNA : 5008c
length: 30

mfe: -30.9 kcal/mol
p-value: 1.000000e+00

position 18199
target 5' A A G ACAUGUU C A 3'
AGUU AUG UUACC CUA UAUCACC GCG
UCGA UAC AGUGG GAU AUGGUGG UGC
miRNA 3' G G U U G 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -30.9 kcal/mol
p-value: 1.000000e+00

position 25210
target 5' A A UG UG G G U 3'
CA UUAUGCUU C UAU ACCA U UGC
GU GAUACGAG G AUA UGGU G GCG
miRNA 3' C UG UG G UU 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -30.9 kcal/mol
p-value: 1.000000e+00

position 13037
target 5' U U UG UG GA A U 3'
CUGUGC UU C UA UGCUGCUAA GC
GAUACG AG G AU AUGGUGGUU CG
miRNA 3' GUC UG UG G 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -30.7 kcal/mol
p-value: 1.000000e+00

position 15990
target 5' U UAGA C AAACAUCCUA GGAGU U 3'
UAGCUA UGCUUACC ACU UACU AUCA AUGC
GU CGAU ACGAGUGG UGA AUGG UGGU UGCG
miRNA 3' U 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -30.6 kcal/mol
p-value: 1.000000e+00

position 13373
target 5' G A ACU GAACCC UCAGUCA A 3'
UAGUUGUG UCA CCGC AUGCU GCUGAUGC
GU CGAUAC AGU GGUG UAUGG UGGUUGCG
miRNA 3' G A 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -30.6 kcal/mol
p-value: 1.000000e+00

position 12393
target 5' U CCUUGAA A UCUUA A A 3'
GGUUGUGUUC CAU AUACC CAAC GC
UCGAUACGAG GUG UAUGG GUUG CG
miRNA 3' G UG A UG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -30.6 kcal/mol
p-value: 1.000000e+00

position 16118
target 5' U AUG A UU G A 3'
GUUAUGCUUACUA AUA CAC CAA GU
CGAUACGAGUGGU UAU GUG GUU CG
miRNA 3' GU GA G G 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -30.6 kcal/mol
p-value: 1.000000e+00

position 26654
target 5' C AACUUUAACUUGUUU UU AGAAUAAAUUGGAU GG G 3'
CAGU UGUGCUUGCUGCUGU AC CACC UG
GUCG AUACGAGUGGUGAUA UG GUGG GC
miRNA 3' UU G 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -30.3 kcal/mol
p-value: 1.000000e+00

position 12318
target 5' G A A U UAGAAAGUUGGAUAA A 3'
CAG C AUGCUU UCACUAUGCU UGAUGC
GUC G UACGAG GGUGAUAUGG GUUGCG
miRNA 3' A U UG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -30.3 kcal/mol
p-value: 1.000000e+00

position 1986
target 5' U UGA AU AUUUG A 3'
GCUA UGUUCAC CUG GCUACUAC
CGAU ACGAGUG GAU UGGUGGUUG
miRNA 3' GU GU A CG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c

length: 30

mfe: -30.2 kcal/mol
p-value: 1.000000e+00

position 15075
target 5' G G U U UG A AUG A 3'
UAGCUG UG CUC AUC U GUACU ACCAAU
GU CGAU AC GAG UGG A UAUGG UGGUUG
miRNA 3' UG CG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -30.0 kcal/mol
p-value: 1.000000e+00

position 4575
target 5' U CAA UG UA A UG U 3'
GUUA UGC CACU GCUAUG AC CA GC
CGAU ACG GUGG UGAUUA UG GU CG
miRNA 3' GU A GG UG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -30.0 kcal/mol
p-value: 1.000000e+00

position 11400
target 5' U A UAGAUCAA U GU G U 3'
GGU AUGCUU GCCAUU CCAU G GC
UCG UACGAG UGGUGA GGUG U CG
miRNA 3' G A UAU GU G 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -29.9 kcal/mol
p-value: 1.000000e+00

position 9326

```
target 5'      A      UA      AUUCA  U  GG  U 3'
           UAUGUU  CACCACUA      ACC AUU  UGC
           AUACGA  GUGGUGAU      UGG UGG  GCG
miRNA  3' GUCG                        A      UU      5'
```

```
dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30
```

```
mfe: -29.9 kcal/mol
p-value: 1.000000e+00
```

```
position 435
target 5' A      CCUA      AACGUUCGG      G  U  A 3'
           CAGC  UGUGUUCAUCA      AUGCU C AAC GC
           GUCG  AUACGAGUGGU      UAUGG G UUG CG
miRNA  3'                        GA      U G      5'
```

```
dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30
```

```
mfe: -29.8 kcal/mol
p-value: 1.000000e+00
```

```
position 15435
target 5' C  G  GAAC      GGAG      U  U 3'
           CAG UG  CUCAUCA  AUGCCAC AAC GC
           GUC AU  GAGUGGU  UAUGGUG UUG CG
miRNA  3'      G  AC      GA      G      5'
```

```
dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30
```

```
mfe: -29.8 kcal/mol
p-value: 1.000000e+00
```

```
position 24079
target 5' A      UAACG C      U      UU  U 3'
           AGUU  G CUUACUGUU UGCCACC  UGC
           UCGA  C GAGUGGUGA AUGGUGG  GCG
miRNA  3' G      UA      U      UU      5'
```

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -29.7 kcal/mol
p-value: 1.000000e+00

position 23578
target 5' G GUCAAUCCAUCAU CUA U GG A 3'
UAGCUA UGC CACUAUGUCAC U UGC
GU CGAU ACG GUGAUAUGGUG G GCG
miRNA 3' AGUG UU 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -29.7 kcal/mol
p-value: 1.000000e+00

position 26281
target 5' U A U UUACU U 3'
GCUA GUU CACUA GCCA CC GCGC
CGAU CGA GUGAU UGGU GG UGCG
miRNA 3' GU A GUG A U 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -29.7 kcal/mol
p-value: 1.000000e+00

position 64
target 5' U CA G UUAGUG C A 3'
GGCUGU CUC GCUGC AUGC CACU ACGC
UCGAUA GAG UGGUG UAUG GUGG UGCG
miRNA 3' G C A U 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -29.6 kcal/mol
p-value: 1.000000e+00

position 26121
target 5' C AAUGGAACCAAUU AUGA G GACG G 3'
CAGU UAUG ACC AC ACUACUAGCGU
GUCC AUAC UGG UG UGGUGGUUGCG
miRNA 3' GAG AUA 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -29.6 kcal/mol
p-value: 1.000000e+00

position 18814
target 5' C AUGCAA G GGUGUCUAGCUGU G U 3'
UAGUUGUG UCAU ACUA CCAC AGUGC
GUCCAUAC AGUG UGAU GGUG UUGCG
miRNA 3' G G AU G 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -29.5 kcal/mol
p-value: 1.000000e+00

position 3688
target 5' U GGUAUUUUUG G AUU UUAAGA U 3'
CAGCU GUGCU ACC CUAUAC CU GU
GUCCG UACGA UGG GAUAUG GG CG
miRNA 3' G U GU UUG 5'

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -29.4 kcal/mol
p-value: 1.000000e+00

position 9626
target 5' U A UUA UUUCUGGAUAA U U 3'

```

          GGUUAUGUUCAC C CU   GUACC          CAA UGC
          UCGAUACGAGUG G GA   UAUGG          GUU GCG
miRNA  3' G               U           UG               5'

```

```

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

```

```

mfe: -29.4 kcal/mol
p-value: 1.000000e+00

```

```

position 17075
target 5' U   UGGCCUA   U   CCCU   UG U   A 3'
          GCUAU   GCUC CUACUA   UC C CGC
          CGAUA   CGAG GGUGAU   GG G GCG
miRNA  3' GU               U   AU   UG UU   5'

```

```

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

```

```

mfe: -29.4 kcal/mol
p-value: 1.000000e+00

```

```

position 2803
target 5' G AA   UG   AGU G   U 3'
          AG GUGCUC C CUAUAC   U AAC
          UC UACGAG G GAUAUG   G UUG
miRNA  3' G GA   UG U   GU G   CG 5'

```

```

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

```

```

mfe: -29.4 kcal/mol
p-value: 1.000000e+00

```

```

position 10727
target 5' U   AAG   A   GA   U   A 3'
          GGCUAUG   UAC AUUAU   ACC CUAAC
          UCGAUAC   GUG UGAUA   UGG GGUUG
miRNA  3' G   GA   G   U   CG 5'

```

dataset: 1
target: ON024493.1
length: 29780
miRNA : 5008c
length: 30

mfe: -29.3 kcal/mol
p-value: 1.000000e+00

position 12056
target 5' A A C GAGUUUAGUU U U A 3'
AGCUAU G CUCA CC CU CCAUCA AUGC
UCGAUA C GAGU GG GA GGUGGU UGCG
miRNA 3' G U UAU 5'
