

## SUPPLEMENTARY SEQUENCES FILE.

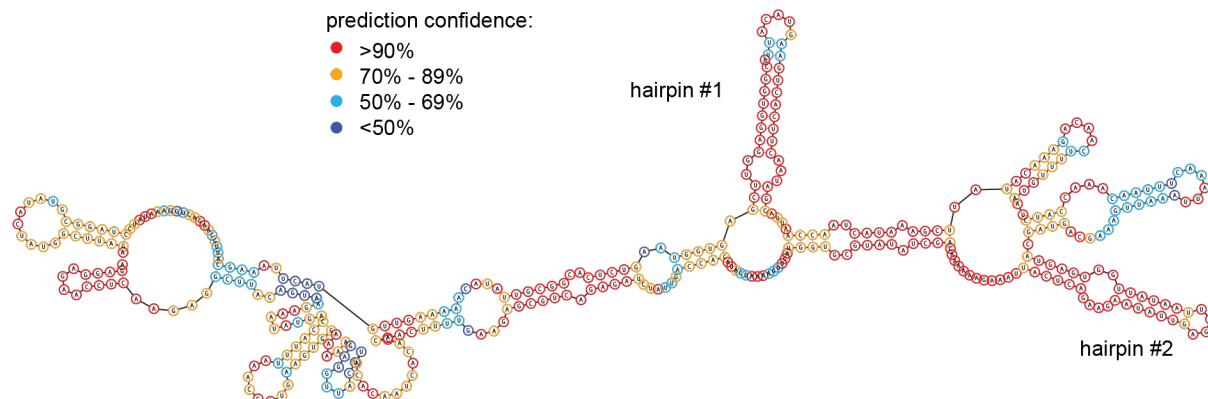
### Sequences of RNA species pulled down from infected cells using Ssc-CdnE03

#### 400-nt bacteriophage RNA pulled down during $\Phi 80\alpha$ -vir infection (cabRNA $_{\Phi 80\alpha}$ ):

5'-

AGAGGAGAACCUAAGAGGCUUACAGUAAGAAUAUGACCAUUUAAACGAUGAA  
GUGGAAAAAGAGGUUACUUACACAAUCACACCAACUUUUGAAGAGCGUCAGAGA  
UCUAUUGACCACAUACUAAAAGUUCAUGGUGCGUUAUCGACAAAAAGAAAUUA  
CUCAGAAGAAUUAUGAGAUUAAUUGGUGAGUACGAUGACGAAAGUAAAUA  
AACUUUAACAAACCAUCUAAUGUUUUCAACAGAAACAUUAUCGAAAUACUAACCA  
AUUACGAUAACUUCACUGAAGUACAUUACGGUGGAGGUUCGAGUGGUAGUCUC  
ACGGCGUUUAACAAAAAGUUGUACUUAAAGCAUUGCAAGACUGACUGGAAUAUCCUA  
GGCGUUAUACUAUGGCUUAGA-3'

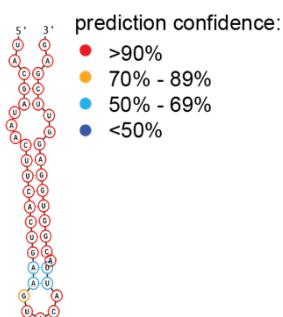
Predicted structure:



Hairpin #1 sequence:

5'-UACGAUAACUUCACUGAAGUACAUUACGGUGGAGGUUCGAG-3'

Predicted structure:

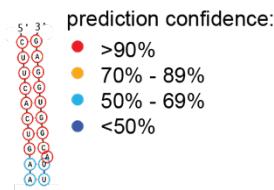


Hairpin #1 stem sequences:

5'-CUUCACUGAA-3'

3'-GAGGUGGCAUU-3'

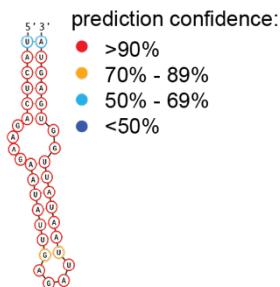
Predicted structure:



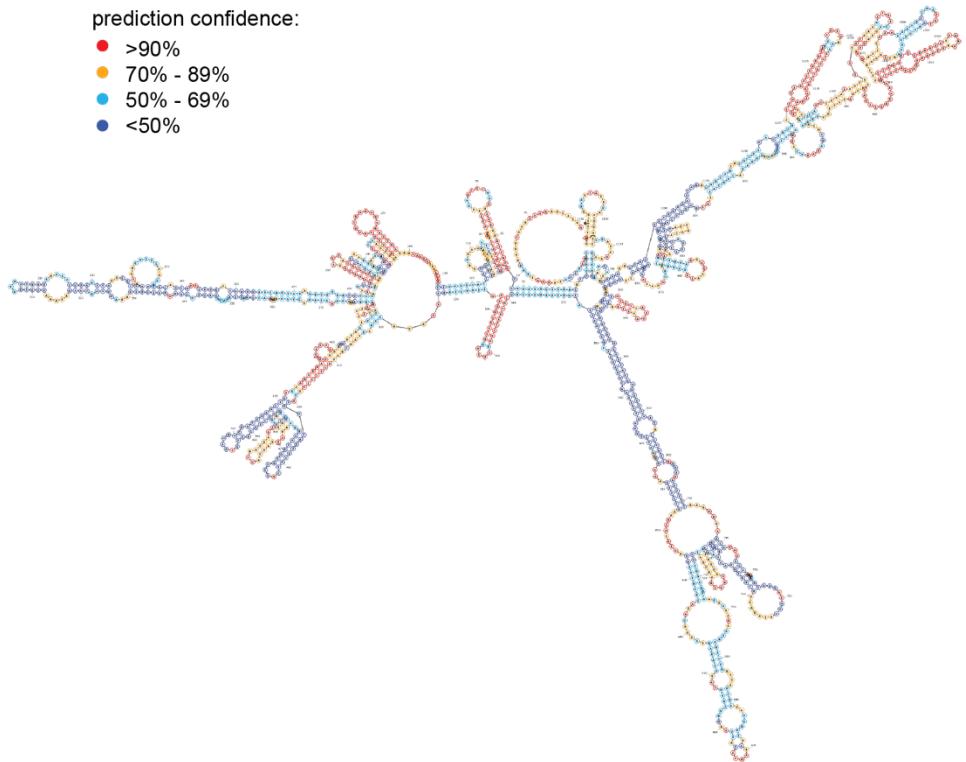
Hairpin #2 sequence:

5'-UACUCAGAAGAAUUAUGAGAUUAAUUGGUGAGUA-3'

Predicted structure:



**1237-nt bacteriophage RNA pulled down during  $\Phi 80\alpha$ -vir gp40<sub>S74F</sub> infection:** 5'-AUGACUAAAAGAAAAUUGGAUUAAAUAUCAACAGUUCGAAAGUUAGAAGAUG AGUUGUGUGAUUAUCCUAAUUAUCAUAAGCAACUCGAAGAUUUAAGAAGUGAAA UAAUGACACCAUGGAUUCCAACAGAUACAAUUAAGGCCGGGAGUUUGUACCGU CUAAUACAUCGAAAACAGAAAUGGCAGUAACUAAUUAUCUUUGUAGUAUACGAAG AGGUAAAACCUUUGAGUUUAAGAGCGCUAUUGAACGUUAUCAACACAUCAAG UAGGAAAGAACGCGAAUUCAUUCAAGAGUUAUUAUAAAAGGAAUUAUGU GAAAGUUUUGUGAUGACAUACACAUUCUGAUAGAACUGCUCAUAGAAUCAAAAG GAAAUCAUACUAGAUUGGCCAGAGGUUAGGGAGAGUGAAUUGGCAGUA AAGUGGCAGUUUUGAUACCUCAAAAGAGAUUAUAGAUAGUGUAGGUUAUUGA CUAUCUUACUGCGUUUCCCUUAUCGCAAUUAGGAAUAAAGGAUCUAUGUGGUU GGCUGAUUAUAGCCAUCUCCCCUUAUCGCAAUUAGCAGAUAGCGCGAGAGUU GGUGGUAAAUGAAAUGAACGAAAAACAAAAGAGAUUCGCAGAUGAAUUAUUAUG AAUGGAUGUAUUGGUAAAAGCAGCAAUUUCAGCAGGUUAUAGUAAGAAAACA GCAGAGUCUUUAGCAAGUCGAUUGUUAGAAAUGUUUAGGUUACUACACACAC CAACUUUUGAAGAGCGUCAGAGAUCUAUUGACCACAUACUAAAAGGUCAUGGUG CGUUAUACGACAAAAAGAAAUCAGAAGAAUUAUGAGAUUAUUAUGGUGA GUACGAUGACGAAAGUUAAAACUUAACCAAUUACGAAUACUUCACUGAAGUACAUUACGGU GGAGGUUCGAGUGGUAGUCUCACGGCGUUUAACAAAAGGUUGUACUUAAAGCA UUGCAAGACUGGAAAUAUCCUAGGCGUAUACUAUGGCUUAGA-3'



#### 400-nt bacteriophage RNA pulled down during $\Phi\text{NM1}\gamma_6$ infection (cabRNA $_{\Phi\text{NM1}\gamma_6}$ ):

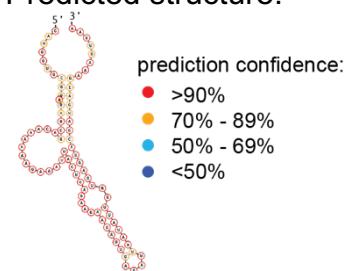
5'-

AGAGGAGAACCUAAGAGGCUUACAGUAAGAAUAUGACCAUUUAACGAUGAA  
 GUGGAAAAAGAGGUUACUUACACAUCACACCAACUUUUGAAGAGCGUCAGAGA  
 UCUAUUGACCACAUACUAAAAGUACAUUGGUGCGUUAUCGAUAAAAAGAAUUA  
 CUCAGAAGAAUUAUGAGAUUAAUUGGUGAGUACGAUGACGAAAGUAAAUA  
 AACUUUAACAAACCAUCUAUAGUUUCAAUAGAAACAUAUUCGAAAACUAACCA  
 AUUACGAUAACUUCACUGAAGUACAUUACGGUGGAGGUUCGAGCGUAAGUCUC  
 ACGCGUUUAACAAAAAGUUGUACUUAAAGCAUUGCAAGACUGGAAAUAUCCUA  
 GGCGUUAACUAUGGCUUAGA-3'

#### 80-nt bacteriophage RNA pulled down during $\Phi 80\alpha\text{-vir}(\text{cabRNA}^{100})$ : 5'-

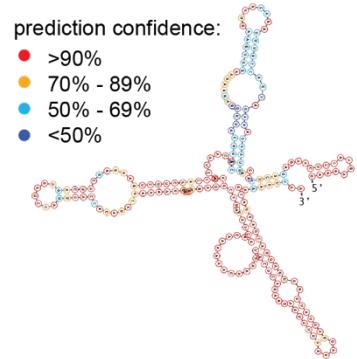
AUGGUGCGUUAUCGACAAAAAGAAAUACUCAGAAGAAUUAUGAGAUUAAUAU  
 UGGUGAGUACGAUGACGAAAGUUA-3'

#### Predicted structure:



**200-nt bacteriophage RNA pulled down during  $\Phi 80\alpha$ -vir(cabRNA<sup>57</sup>):5'-**  
AGAGGAGAACCUAAGAGGCUUACAGUAAGAAUAUGACCAUUUAACGAUGAA  
GUGGAAAAAGAGGUUACUUACACAAUCACACCAACUUUUGAAGAGCGUCAGAGA  
UCUAUUGACCACAUACUAAAAGUUCAUGGUGCGUUAUCGACAAAAAAGAAUUA  
CUCAGAAGAAUUAUGAGAUUAAUUUGGUGAGUACGA-3'

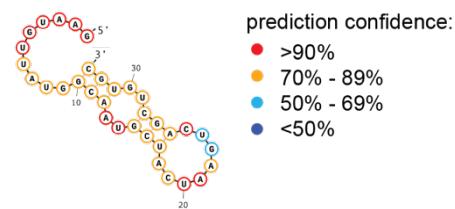
Predicted structure:



**34-nt bacteriophage RNA pulled down during  $\Phi J1$  and  $\Phi J2$  infection (cabRNA <sub>$\Phi J1/2$</sub> ):**

5'-GAATGTTATGGCAATGCTACTAAGTCAGCTGTGC-3'

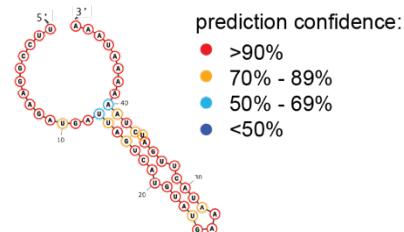
Predicted structure:



**49-nt bacteriophage RNA pulled down during  $\Phi J4$  infection (cabRNA <sub>$\Phi J4$</sub> ):**

5'-TTCCGGAAGATGATTAGTCATGTATGAAATACTTGATCTAAAAAATAAA-3'

Predicted structure:



## Sequence of the RNA species pulled down from infected cells using Sha-CdnE01

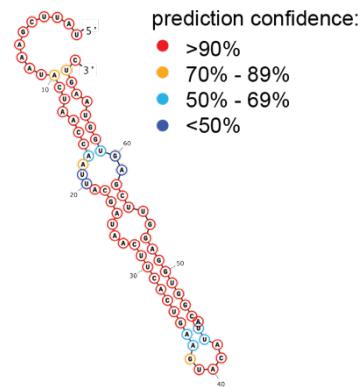
**400-nt bacteriophage RNA pulled down during  $\Phi 80\alpha$ -vir infection (cabRNA $_{\Phi 80\alpha}$ ):**

5'-

AGAGGAGAACCUAAGAGGCUUACAGUAAGAAAUAUGACCAUUUAAACGAUGAA  
GUGGAAAAAGAGGUUACUUACACAAUCACACCAACUUUUGAAGAGCGUCAGAGA  
UCUAUUGACCACAUACUAAAAGUUCAUGGUGCGUUAUCGACAAAAAAGAAUUA  
CUCAGAAGAAUUAUGAGAUUAAUUUGGUGAGUACGAUGACGAAAGUUAAAUA  
AACUUUAACAAACCAUCUAUGUUUCAACAGAAACAUAUUCGAAAUAACUAACCA  
AUUACGAUAACUUCACUGAAGUACAUUACGGUGGAGGUUCGAGUGGUAGUCUC  
ACGGCGUUUAACAAAAAGUUGUACUUAAAGCAUUGCAAGACUGGAAUAUCCUA  
GGCGUAUACUAUGGCUUAGA-3'

**70-nt bacteriophage RNA pulled down during  $\Phi 80\alpha$ -vir infection (hairpin #1):** 5'-  
UAUUCGAAAUAACUAACCAAUUACGAUAACUUCACUGAAGUACAUUACGGUGGAG  
GUUCGAGUGGUAGUC -3'

Predicted structure:



**Sequences of gp40 from bacteriophages used in this study:**

***gp40 sequence from Φ80α-vir: 5'-***

ATGAACGAAAAACAAAAGAGATTGCAGATGAATATAATGAATGGATGTAATGGT  
AAAAAAGCAGCAATTTCAGCAGGTTAGTAAGAAAACAGCAGAGTCTTAGCAAG  
TCGATTGTTAAGAAATGTTAATGTTCGGAATATATTAAAGAACGATTAGAACAGAT  
ACAAGAAGAGCGTTAATGAGCATTACAGAAGCTTAGCGTTATCTGCTTCTATTGC  
TAGAGGAGAACCTCAAGAGGCTTACAGTAAGAAATATGACCATTAAACGATGAAG  
TGGAAAAAGAGGTTACTTACACAATCACACCAACTTTGAAGAGCGTCAGAGATCT  
ATTGACCACATACTAAAAGTTCATGGTGCCTATCGACAAAAAAAGAAATTACTCAG  
AAGAATATTGAGATTAATATTGGTGAGTACGATGACGAAAGTTAA-3'

***gp40 sequence from Φ80α-vir gp40<sub>S74F</sub>: 5'-***

ATGAACGAAAAACAAAAGAGATTGCAGATGAATATAATGAATGGATGTAATGGT  
AAAAAAGCAGCAATTTCAGCAGGTTAGTAAGAAAACAGCAGAGTCTTAGCAAG  
TCGATTGTTAAGAAATGTTAATGTTCGGAATATATTAAAGAACGATTAGAACAGAT  
ACAAGAAGAGCGTTAATGAGTATTACAGAAGCTTAGCGTTATCTGCTTCTATTGC  
TAGAGGAGAACCTCAAGAGGCTTACAGTAAGAAATATGACCATTAAACGATGAAG  
TGGAAAAAGAGGTTACTTACACAATCACACCAACTTTGAAGAGCGTCAGAGATCT  
ATTGACCACATACTAAAAGTACATGGTGCCTATCGACAAAAAAAGAAATTACTCAG  
AAGAATATTGAGATTAATATTGGTGAGTACGATGACGAAAGTTAA-3'

***gp40 sequence from ΦNM1γ6: 5'-***

ATGAACGAAAAACAAAAGAGATTGCAGATGAATATAATGAATGGATGTAATGGT  
AAAAAAGCAGCAATTACAGCAGGTTAGTAAGAAAACAGCAGAGTCTTAGCAAG  
TCGATTGTTAAGAAATGTTAATGTTCGGAATATATTAAAGAACGATTAGAACAGAT  
ACAAGAAGAGCGTTAATGAGTATTACAGAAGCTTAGCGTTATCTGCTTCTATTGC  
TAGAGGAGAACCTCAAGAGGCTTACAGTAAGAAATATGACCATTAAACGATGAAG  
TGGAAAAAGAGGTTACTTACACAATCACACCAACTTTGAAGAGCGTCAGAGATCT  
ATTGACCACATACTAAAAGTACATGGTGCCTATCGACAAAAAAAGAAATTACTCAG  
AAGAATATTGAGATTAATATTGGTGAGTACGATGACGAAAGTTAA-3'

***gp40 sequence from ΦNM1γ6 gp40<sub>S74F</sub> recombinant: 5'-***

ATGAACGAAAAACAAAAGAGATTGCAGATGAATATAATGAATGGATGTAATGGT  
AAAAAAGCAGCAATTTCAGCAGGTTAGTAAGAAAACAGCAGAGTCTTAGCAAG  
TCGATTGTTAAGAAATGTTAATGTTCGGAATATATTAAAGAACGATTAGAACAGAT  
ACAAGAAGAGCGTTAATGAGTATTACAGAAGCTTAGCGTTATCTGCTTCTATTGC  
TAGAGGAGAACCTCAAGAGGCTTACAGTAAGAAATATGACCATTAAACGATGAAG  
TGGAAAAAGAGGTTACTTACACAATCACACCAACTTTGAAGAGCGTCAGAGATCT  
ATTGACCACATACTAAAAGTACATGGTGCCTATCGACAAAAAAAGAAATTACTCAG  
AAGAATATTGAGATTAATATTGGTGAGTACGATGACGAAAGTTAA-3'

**Mutated cabRNA DNA sequences (5'-3') from  $\Phi 80\alpha$  used in this study. The sequence coding TerS C-terminal amino acid residues (DDES\*) and TerL N-terminus (MMTKVK) is underlined; mutations introduced are in red.**

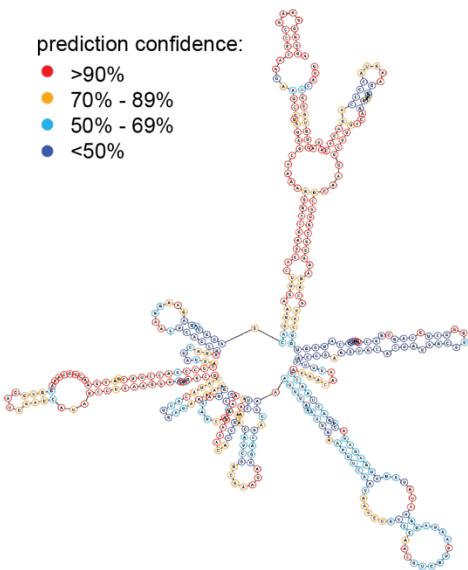
**$\Phi 80\alpha$ -vir**

AGAGGGAGAACCTCAAGAGGGCTTACAGTAAGAAATATGACCATTAAACGATGAAGT  
 GGAAAAAGAGGTTACTTACACAATCACACCAACTTTGAAGAGCGTCAGAGATCTA  
 TTGACCACATACTAAAAGTTCATGGTGCCTATATCGACAAAAAAAGAAATTACTCAGA  
 AGAATATTGAGATTAATATTGGTGAGTACGGACGAAAGTTAAATTAAACTTTAAC  
 AAACCATCTAATGTTTCAACAGAAACATATTGAAATACTAACCAATTACGATAACT  
 TCACTGAAGTACATTACGGTGGAGGTTCGAGTGGTAAGTCTCACGGCGTTATACAA  
 AAAGTTGTACTTAAAGCATTGCAAGACTGGAAATATCCTAGGCGTACTATGGCTT  
 AGA

**$\Phi 80\alpha$ -vir(cabRNA<sup>122</sup>)**

AGGGGGAGGCCCAAGAAGCCTATAGCAAAAAGTACGATCACTTGAATGACGAGG  
 TAGAGAAGGAAGTCACCTATACGATTACGCCGACCTTCGAGGAACGCCAAAGGTC  
 CATCGATCATATCCTGAAGGTCCACGGCGCATACATTGATAAGAAGGAGATCACCC  
 AAAAAAACATCGAAATCACATCGCGAATATGATGACGAAAGTTAAGTTGAATTTC  
 ATAAGCCGTCCAACGTCTTATAGGAATATTTGAGATACTGACTAACTATGAC  
 AATTTCACCGAGGTGCACTATGGCGGGGCTCTAGCGGCAAATCCCATGGTGTCA  
 TACAGAAGGTGCTCAAGGC GTTACAGGATTGGAAGTACCCAGACGCATACT  
 GTGGCTCAGG

Predicted RNA structure:

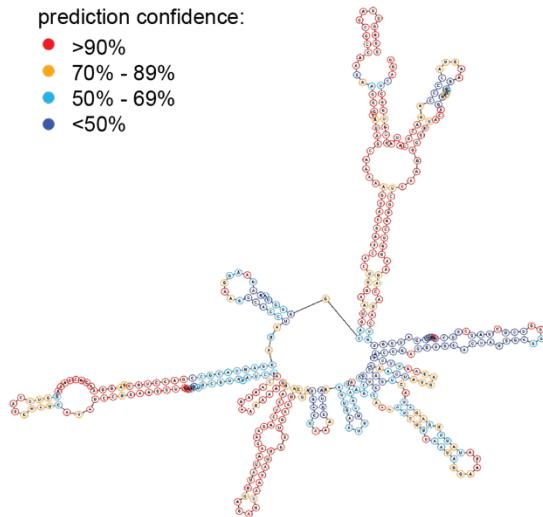


**$\Phi 80\alpha$ -vir(cabRNA<sup>100</sup>)**

AGGGGGAGGCCCAAGAAGCCTATAGCAAAAAGTACGATCACTTGAATGACGAGG  
 TAGAGAAGGAAGTCACCTATACGATTACGCCGACCTTCGAGGAACGCCAAAGGTC  
 CATCGATCATATCCTGAAGGTCCATGGTGCCTATCGACAAAAAAAGAAATTACTC

AGAAGAATATTGAGATTAATATTGGT GAGTACGATGACGAAAGTTAA**GTTGAATTTC**  
 AATAAGCCGTCCAACGTCTTAA**TAGGAATATATTGAGATACTGACTAACTATGAC**  
 AATTTACCGAGGTGCACTATGGCGGGGGCT**TAGCGGCAAATCCCATGGTGTCA**  
 TACAGAAGGTCGT**GCTCAAGGC**TTACAGGATTGGAA**GTACCCCAGACGC**CATACT  
**GTGGCTCAGG**

Predicted RNA structure:



### Φ80α-vir(cabRNA<sup>57</sup>)

AGAGGAGAACCTCAAGAGGCTTACAGTAAGAAATATGACCATTAAACGATGAAGT  
 GGAAAAAGAGGTTACTTACACAATCACACCAACTTTGAAGAGCGTCAGAGATCTA  
 TTGACCACATACTAAAAGTTCATGGTGCGTATATCGACAAAAAAAGAAATTACTCAGA  
 AGAATATTGAGATTAATATTGGT GAGTACGATGACGAAAGTTAA**GTTGAATTTC**AA  
**AAGCCGTCCAACGTCTTA**A**TAGGAATATATTGAGATACTGACTAACTATGAC**AA  
 TTTACCGAGGTGCACTATGGCGGGGGCT**TAGCGGCAAATCCCATGGTGT**CATAC  
 AGAAGGTCGT**GCTCAAGGC**TTACAGGATTGGAA**GTACCCCAGACGC**CATACTGTG  
**GCTCAGG**

Predicted RNA structure:

