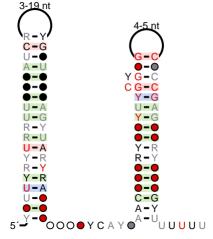
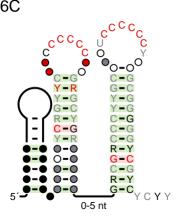
1ZIF seq G - C - 10

1*7* IF

### 23S-methyl

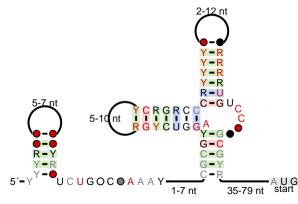


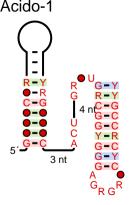


#### 6S-flavo

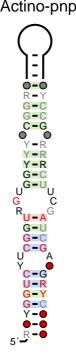


#### ATPC

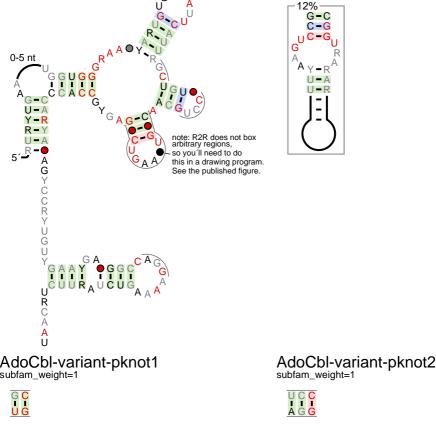




# Acido-Lenti-1 CUR • • • UAUR • CG = C





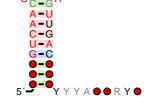


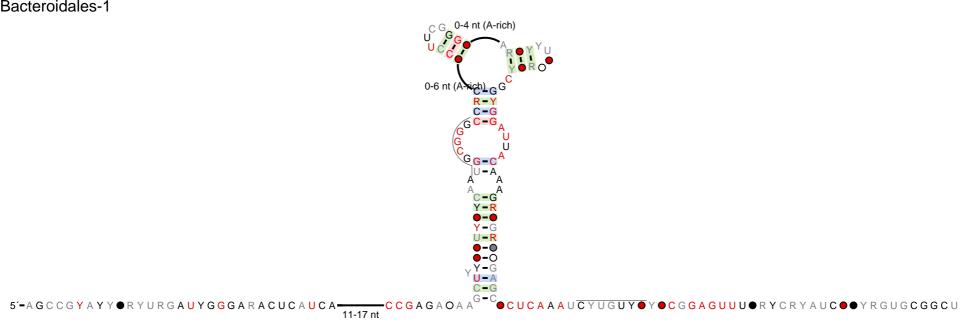
AdoCbl-variant-p7 subfam\_weight=0.115058

AdoCbl-variant

# Bacillaceae-1 5'-A A G G A

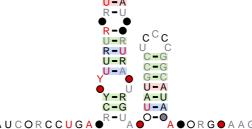
# Bacillus-plasmid





Bacteroidales-1-pknot subfam\_weight=1

## Bacteroides-1



5'-AUGCAAAUCORCCUGA

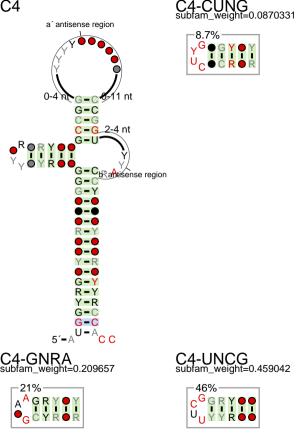
C - G

Bacteroides-2

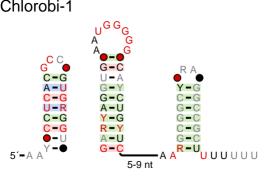


G - C

C-G RCR



# COG2252 5'-RGUCUGU



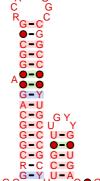
# UGCUUU-GUU-GA-UR-UU-A

Chlorobi-RRM

C-G

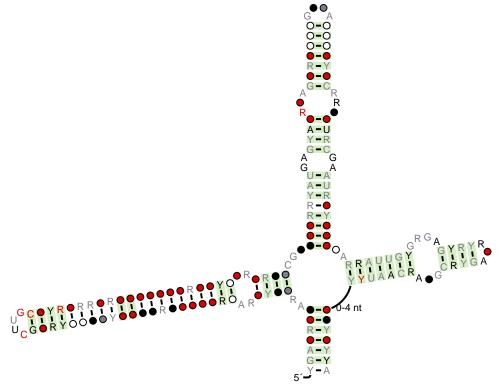


## Chloroflexi-1

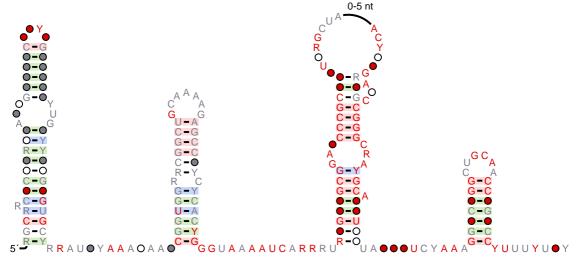


G-C O-O C-G G-U R-C C-G 5'-CGUCCOGUOGROUGCG-YUU-A COGRAACRCROCA

#### Clostridiales-1



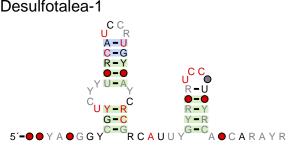
#### Collinsella-1

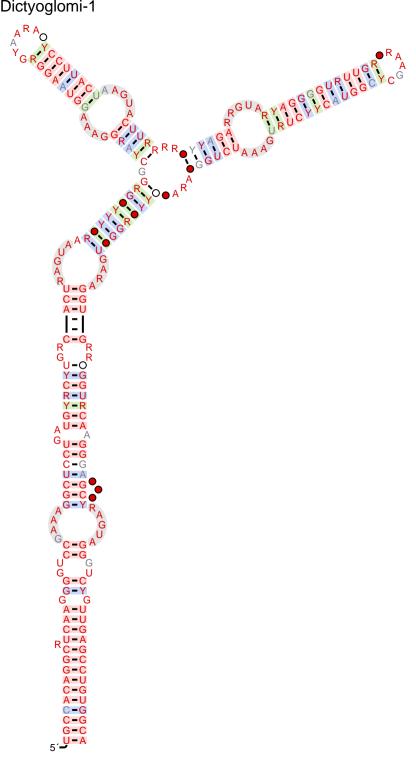


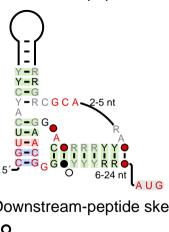
# Cyano-1 0-4 nt 0-3 nt 0-2 nt GURAGG

Cyano-2







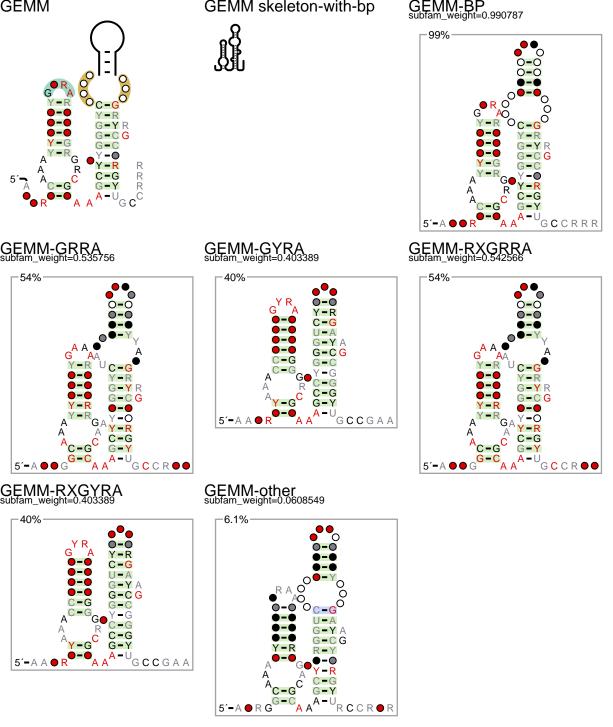


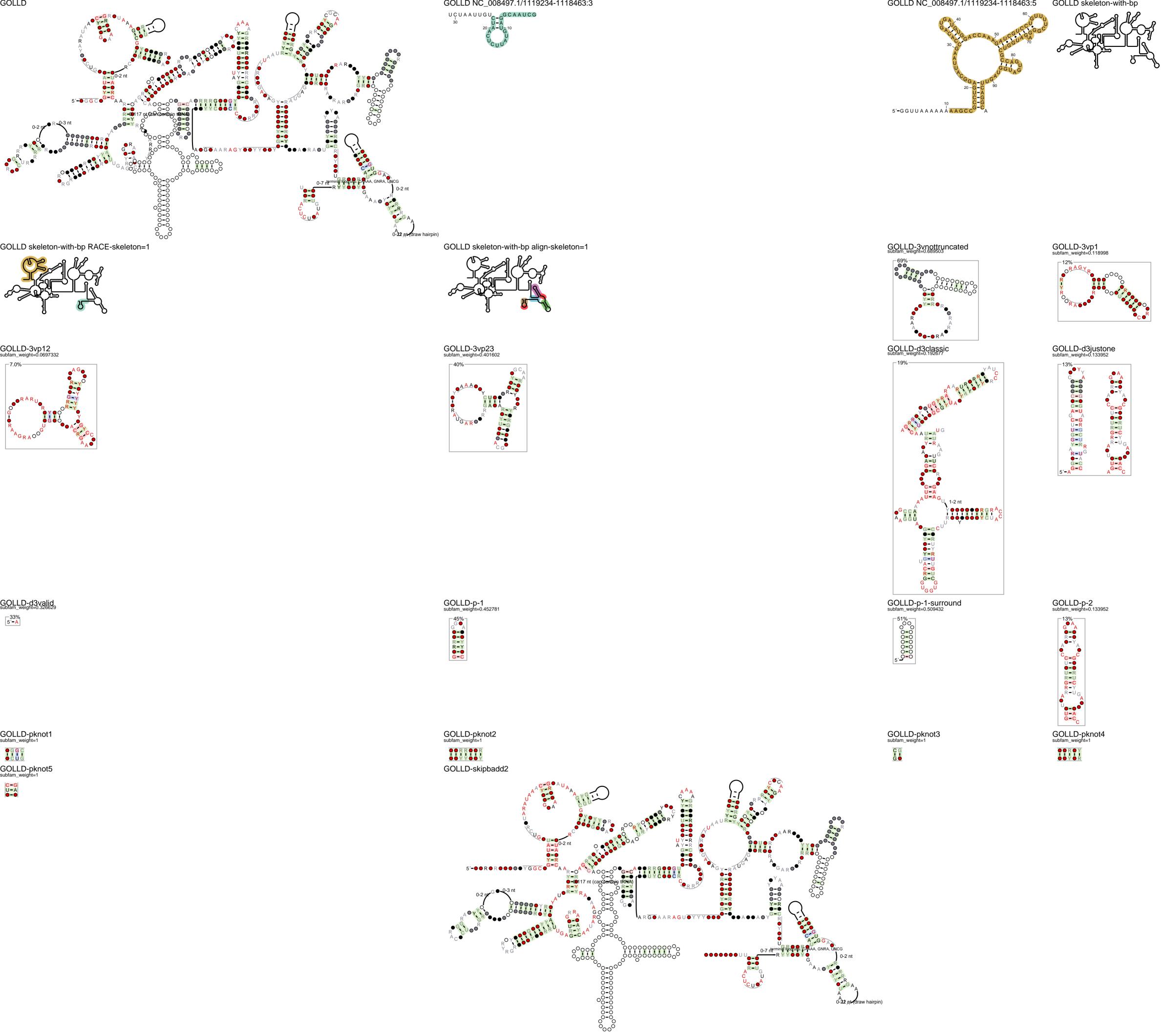
Downstream-peptide

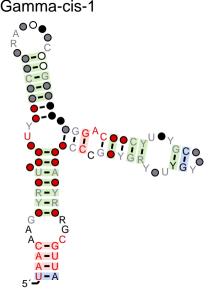
Downstream-peptide skeleton-with-bp



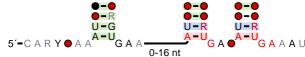
# Flavo R







Gut-1



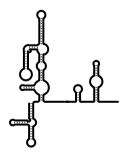
## HEARO **-**AG-UG C = GY - R UC-G U - A CG-C 1-58 nt | O R C U 3' integration AG = CI G A R G • R R R • UGA 5' integration—G=C 0-7 nt 0-1497 nt 0-17 nt **U –** A R-Y usu. has A bMgeG **0-**R

# HEARO NZ\_ABYK01000021.1/61949-61536 pknot=1 Shrinking nucs & bonds using nucShrinkWithCircleNuc and pairBondScaleWithOneSeq

because circle\_nuc or #=GR ... CLEAVAGE was used Set these vars to 1 using SetDrawingParam to disable. See note1 in manual.



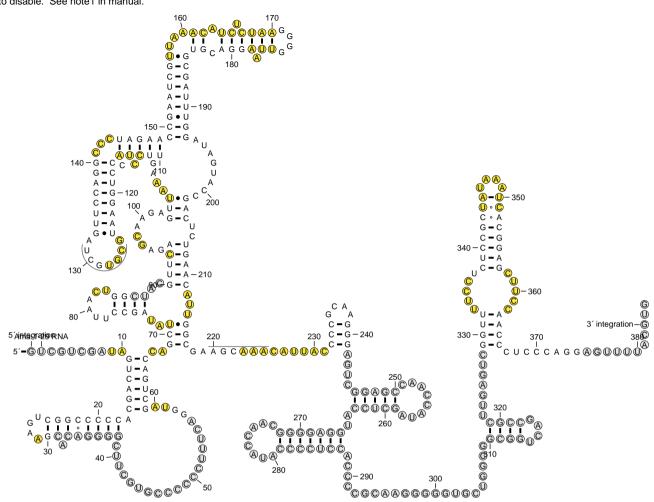
#### HEARO skeleton-with-bp



HEARO-UAA subfam\_weight=0.732286



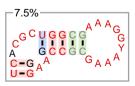
HEARO NZ\_ABYK01000021.1/61949-61536 Shrinking nucs & bonds using nucShrinkWithCircleNuc and pairBondScaleWithOneSeq because circle\_nuc or #=GR ... CLEAVAGE was used Set these vars to 1 using SetDrawingParam to disable. See note1 in manual.



#### HEARO pknot=1



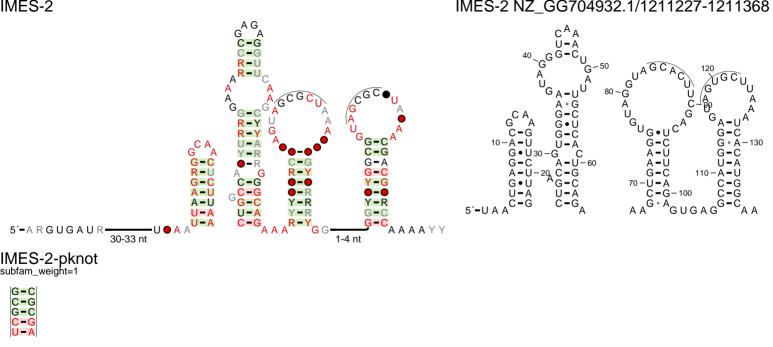
## HEARO-RYGCAA subfam\_weight=0.0745961



A A C R - Y 0-8 n -G-C Ý **–** Ř A - U **-**G A - U Y = R R A G A G A G 2-3 nt AG-CGA - U U-R Α 3-4 nt U = RR A R U - A R R IMES-1-pknot subfam\_weight=1 G-C A **–** U G-C **A** – U

IMES-1

**-** A



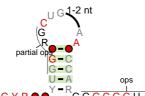
#### R - Y R - • R U-A G-C A' G A U U R U - A G - C U-A A – U G-CA G-C G-CA G G - YG - CG-C U - A G-Y **Y** - R U-R C-G 5'-AGGAUAAAAA ORAAG • URRA

 $\bar{R}$ 

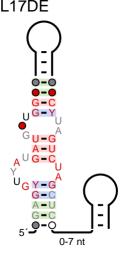
IMES-3

IMES-4 A - U U **–** A U-A U - A0-0 5'-R • U A A - U A - U U = RII - AA = IIR-U A - Y R-U

#### JUMPstart



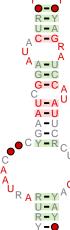




# Lacto-int Y - G A G G U

# ∟acto-rpoB

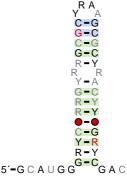
#### Lacto-usp



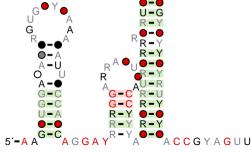
R=Y R=Y

5'-G A U C A A A C U • A A G A C G U • G •

#### MAEB



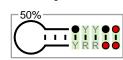
# Methylobacterium-1



## 3-7 nt 5'-GCGCYYAYU<sup>U-A</sup> AACCCGC

Moco-II

Moco 1-75 nt G = C put P3 3' to here C-G Moco-withP3 subfam\_weight=0.496344



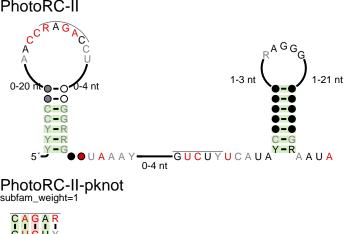
### Nitrosococcus-1 G - Y5'-G A A R C A G G A A R Y - RY - G

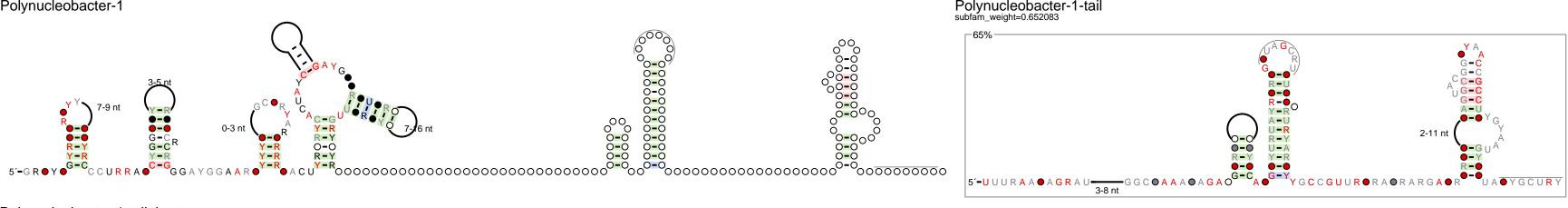
Ocean-V





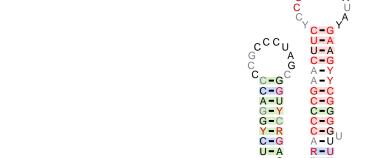
### PhotoRC-I start ACUCUUGCCI **D**UOAACC<sup>G-C</sup> 4-10 nt





#### Polynucleobacter-1-tailpknot subfam\_weight=0.652083

#### Pseudomon-1

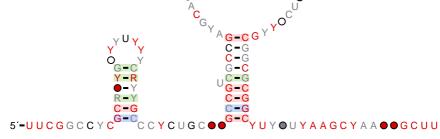


5'-UGCUCCU • OGUUGUGUUA AGUGUUGGCAGAYA-OCUUR-UUUUUGCCYG

#### Pseudomon-2



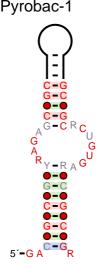
# Pseudomon-Rho C-G



4 nt

Pseudomon-groES





#### Pyrobac-HINT



G-C 5'-GUGYORACCCGGGGCA<sup>G-C</sup>CACCC

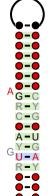
### R - YC-G G-C ● A R ● R ● A A R R

Rhizobiales-1

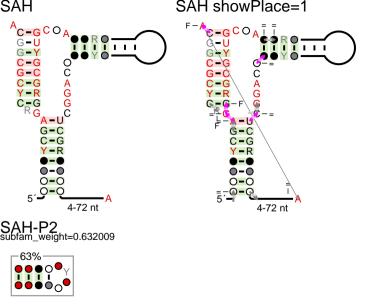
G-C

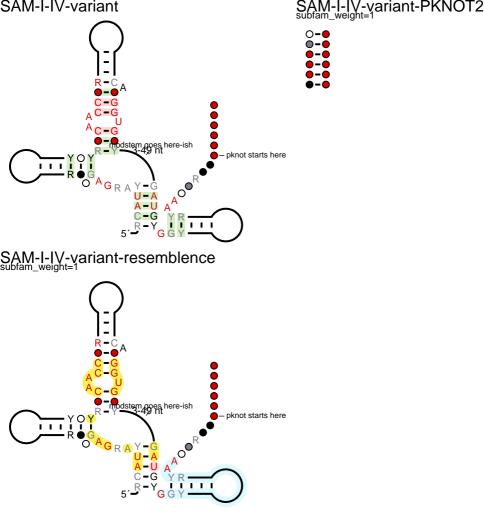
#### Rhizobiales-2 S-L C A U C C G C G G C G A, C-G G-C G-C C-G 4-10 nt C-G Y - R G-C C - GA - U C - GG - CC-G **G - Y** R - U A – U G-C UYOUU 2-4 nt 0-3 nt

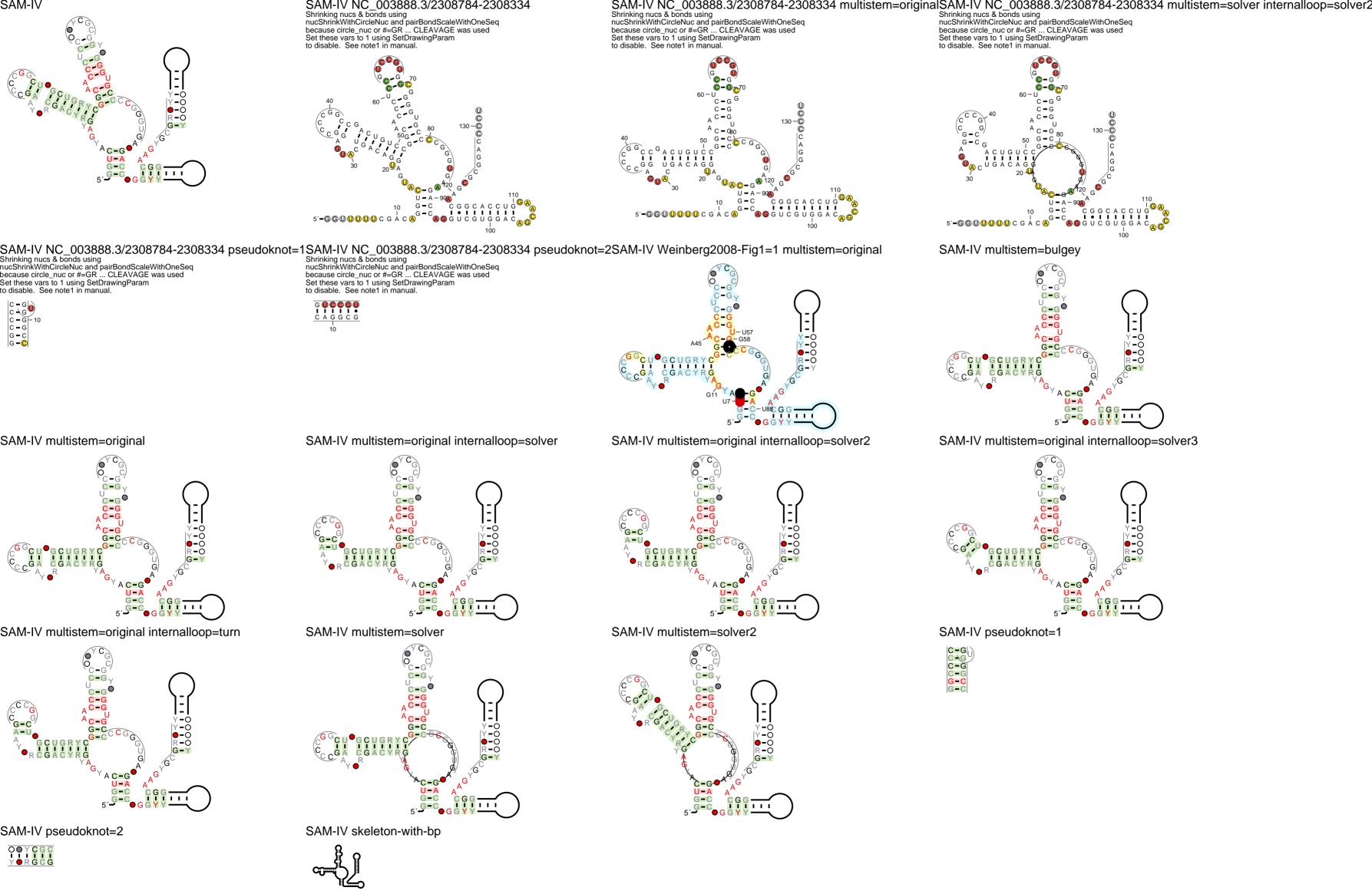
### Rhodopirellula-1

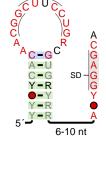


5'-A C • A • • R • C G U U



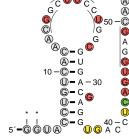






SAM-SAH

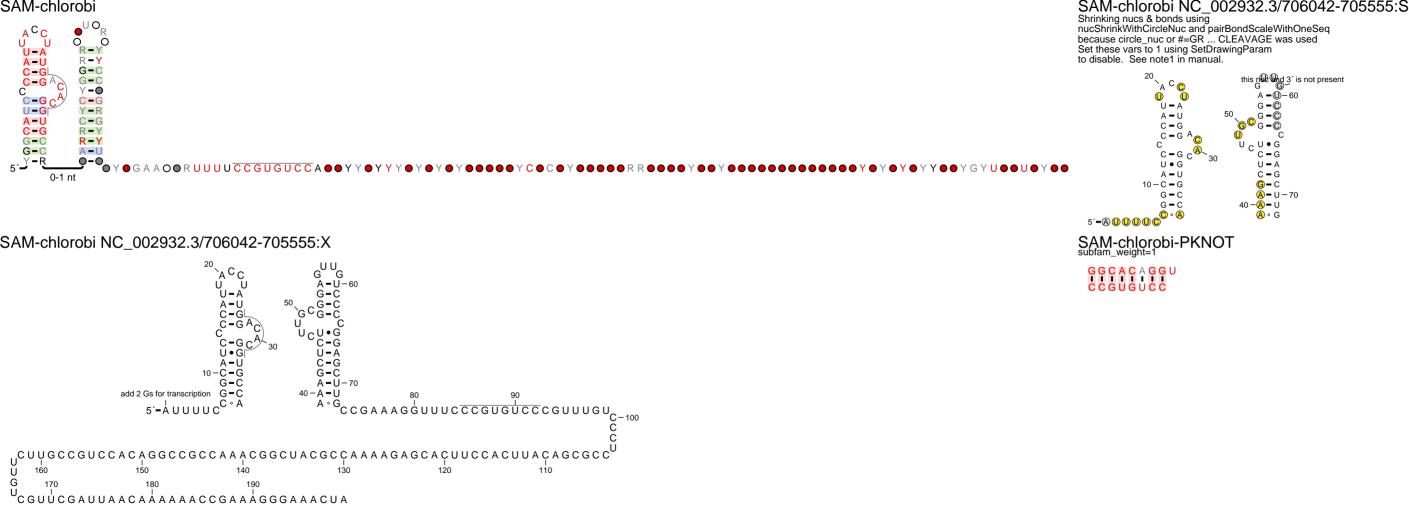
SAM-SAH NZ\_AAYC0100001.1/141950-142398
Shrinking nucs & bonds using
nucShrinkWithCircleNuc and pairBondScaleWithOneSeq
because circle\_nuc or #=GR ... CLEAVAGE was used
Set these vars to 1 using SetDrawingParam
to disable. See note1 in manual.

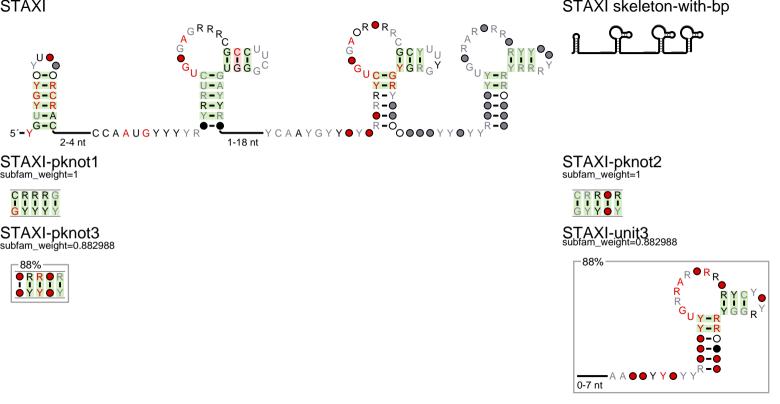


#### SAM-SAH skeleton-with-bpSAM-SAH-pknot1









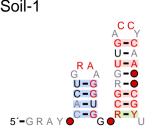




SmallWithCovary 5

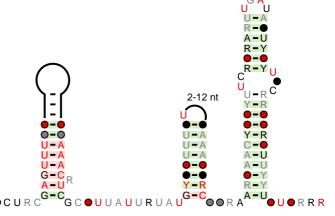
SmallWithCovary

G = C

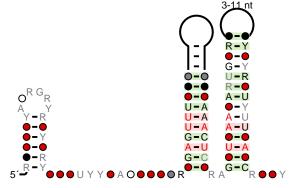


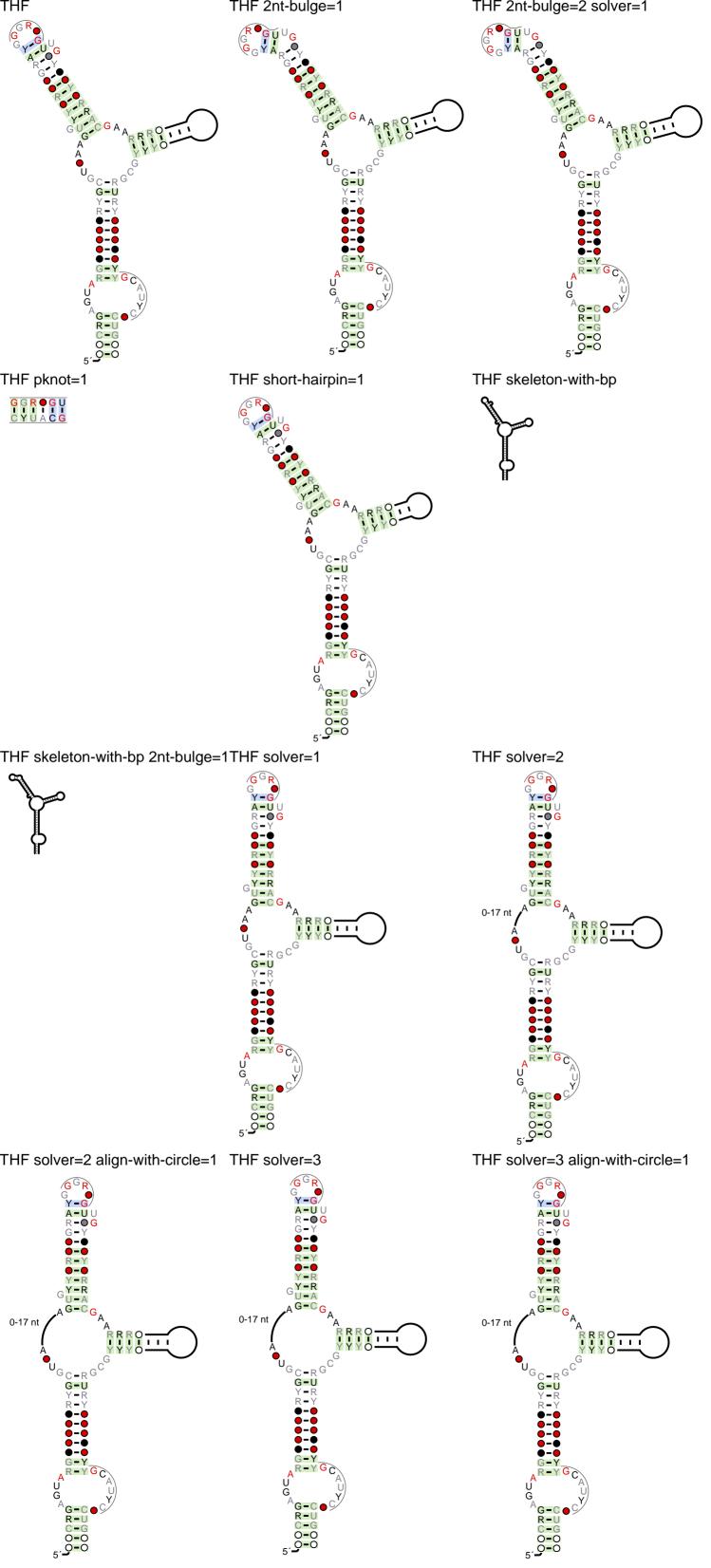
# Solibacter-1 GCACCACCUCAGGU

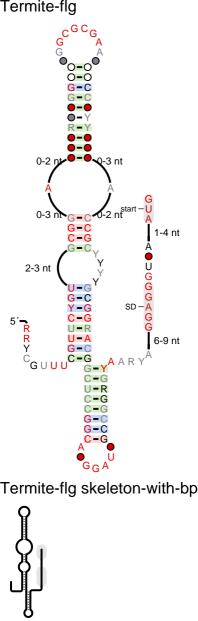
#### TD-1



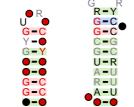
#### TD-2





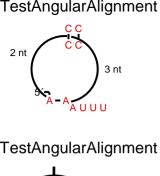


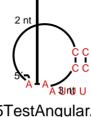
#### Termite-leu √● A<sub>Δ</sub>



\_\_\_\_\_\_

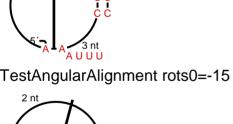
5'-R R C R R • • • • • • • • • • • A R U • • A A R • • R A A G

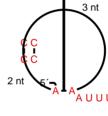


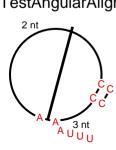


TestAngularAlignment alignangle=-32









#### TestColumnNumbers pos 0 pos 6 5′-0 G 0 0

# Transposase-resistance C-G U **-** A A **–** U A **–** Ū U **–** A C-G

# TwoAYGGAY 0-16 nt 5'-Y 000000 R 000000

#### TwoBasePairs

TwoBasePairs seq

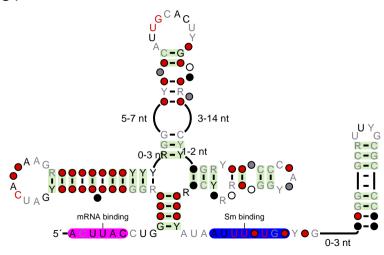


 $\Delta = II$ 

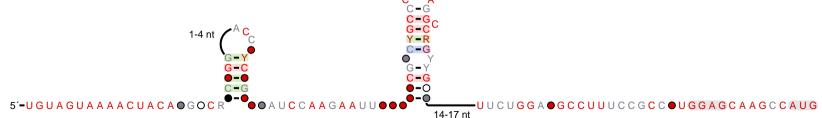
5'G-C

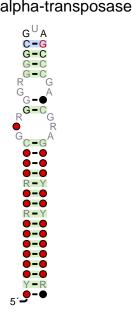
<sup>5′</sup>G-C A-U

J1

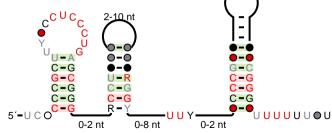


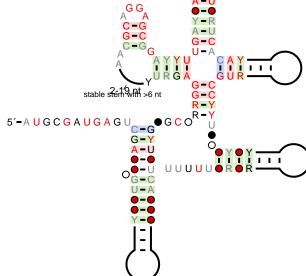
aceE





# anti-hemB

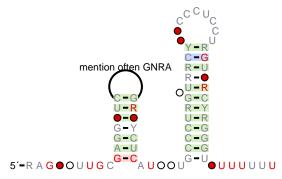




asd skeleton-with-bp



#### atoC

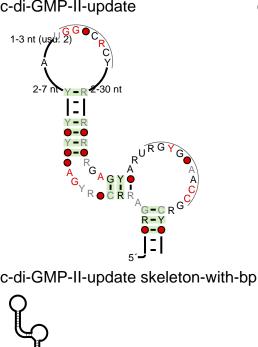








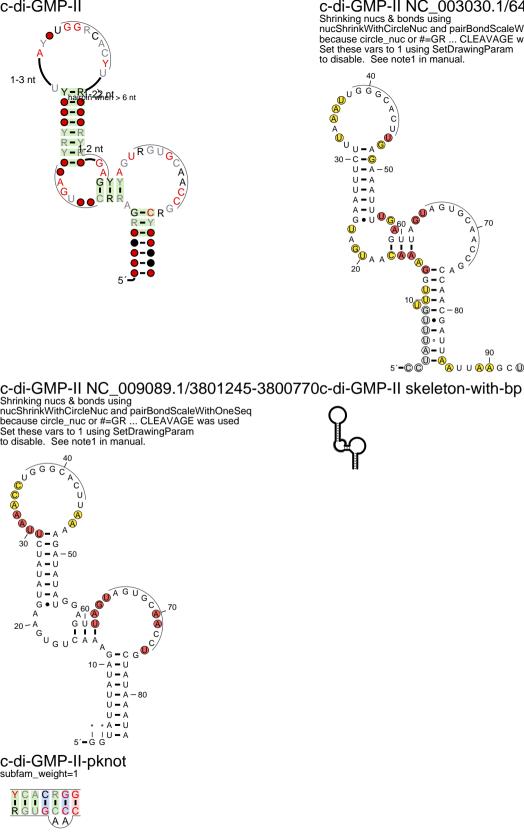
backbone-path1 skeleton-with-bp



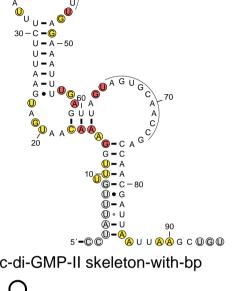


c-di-GMP-II-update pknot=1



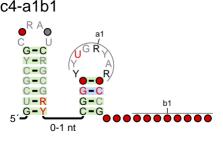


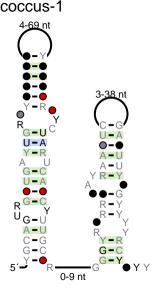
c-di-GMP-II NC\_003030.1/648383-648856
Shrinking nucs & bonds using
nucShrinkWithCircleNuc and pairBondScaleWithOneSeq
because circle\_nuc or #=GR ... CLEAVAGE was used
Set these vars to 1 using SetDrawingParam to disable. See note1 in manual. A - U

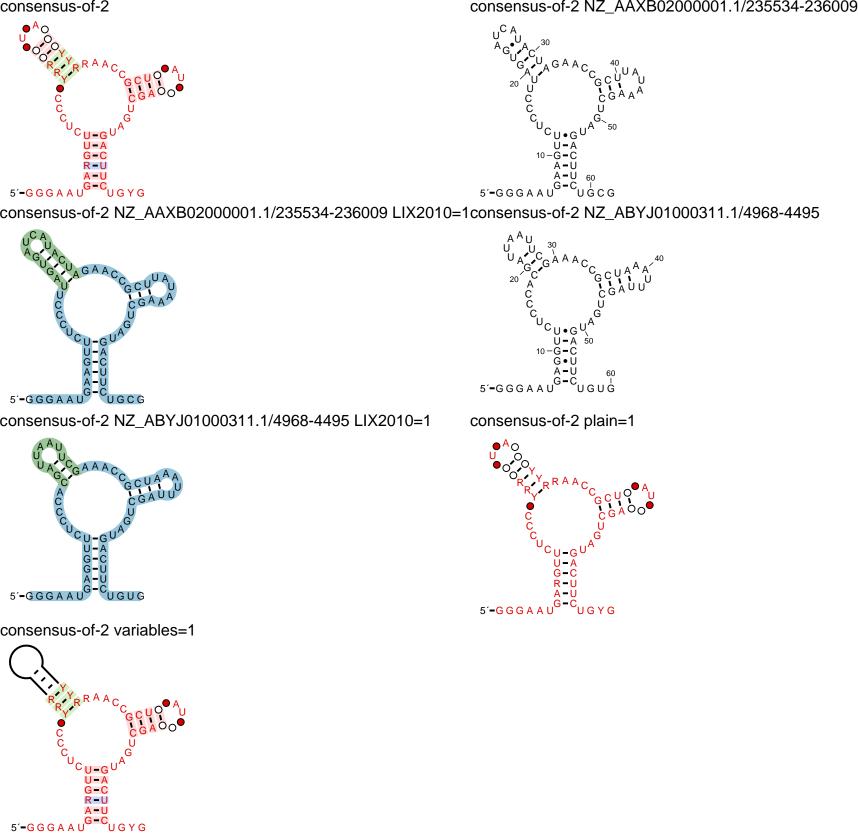


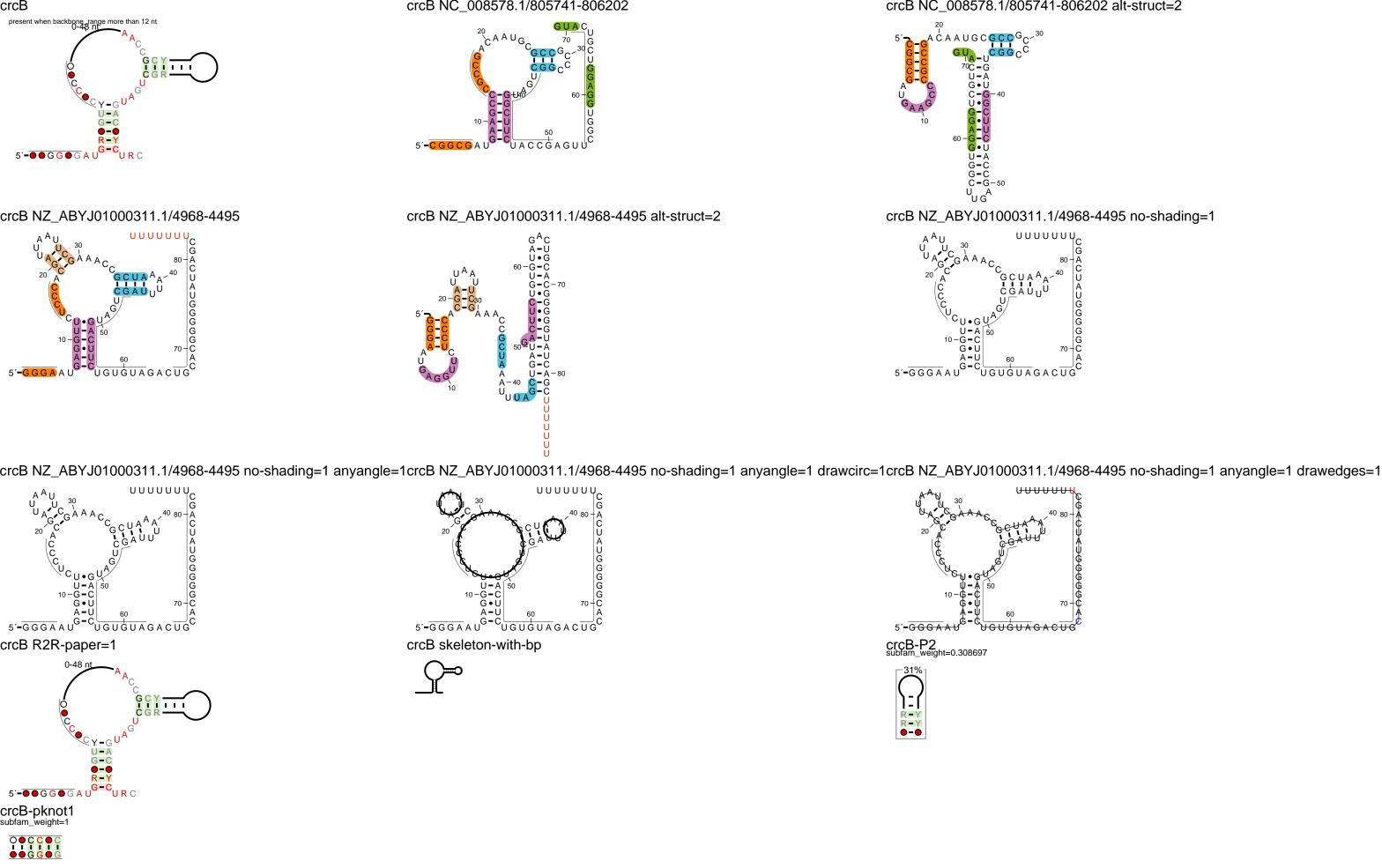


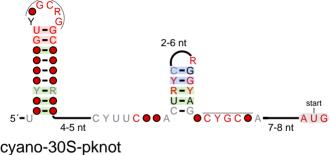














cyano-30S

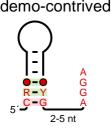


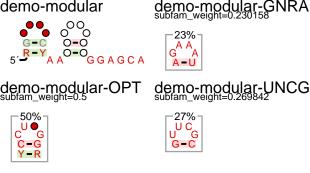
# 5'-A A R - Y

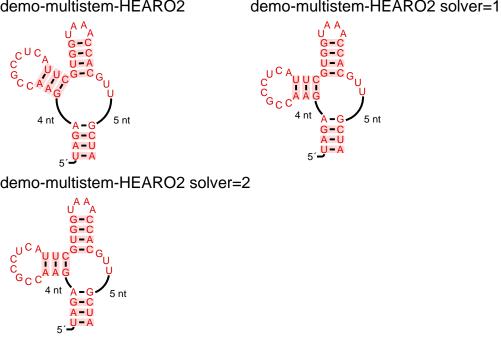
Y

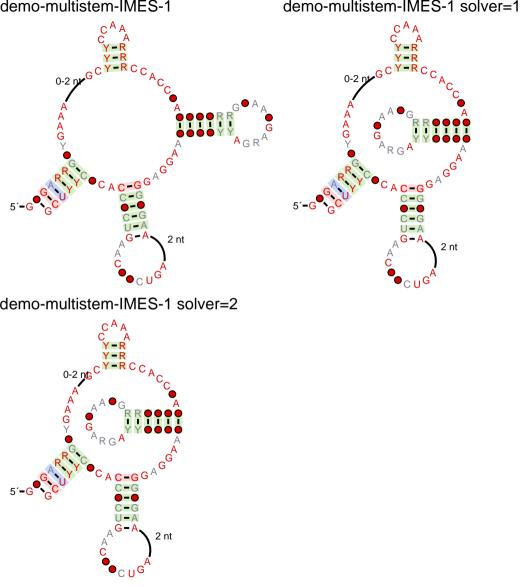


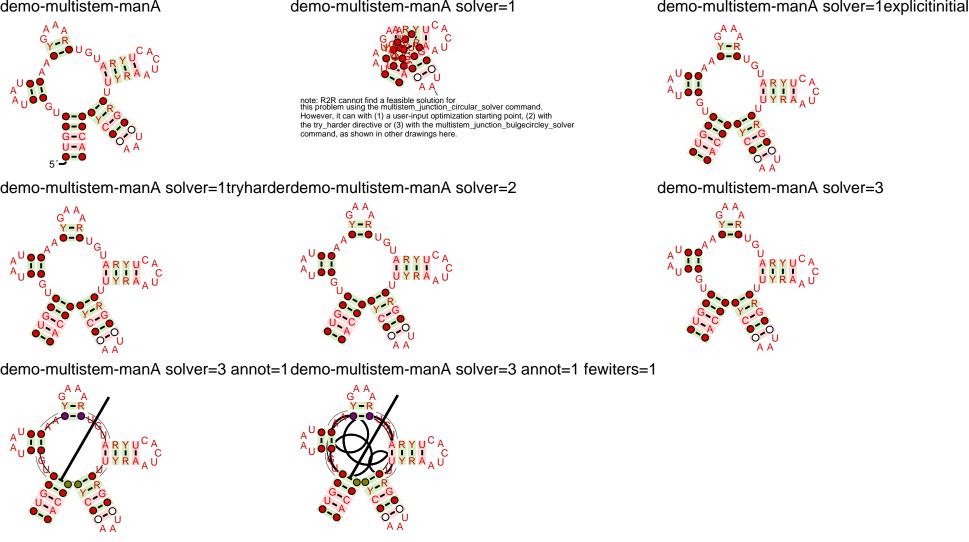
5'-A A R - Y

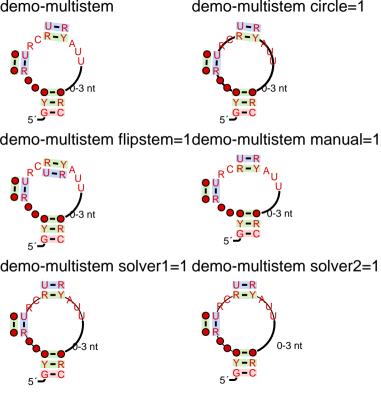






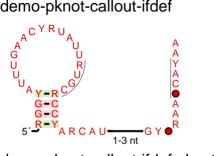


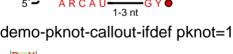




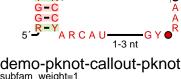
# demo-pe



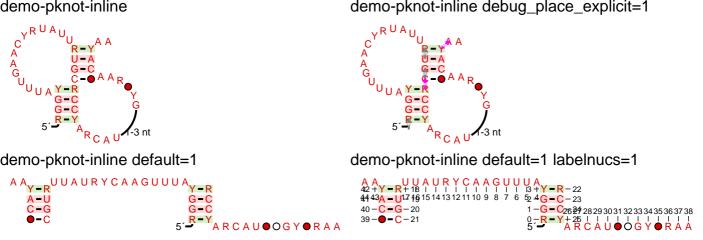


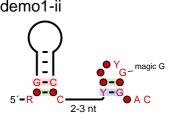


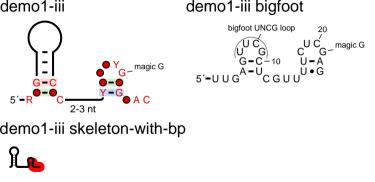




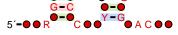
subfam\_weight=1

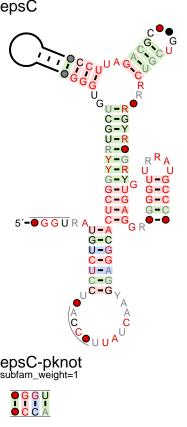


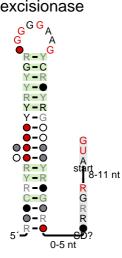




# demo1

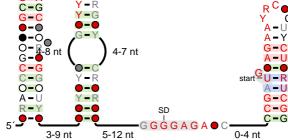


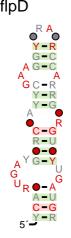




# fixA G - CG-C U-R 5'-CGGUCAAGAUACGRGCGGUU

# flg-Rhizobiales GGA U-G U-A U-G C-G Y-R

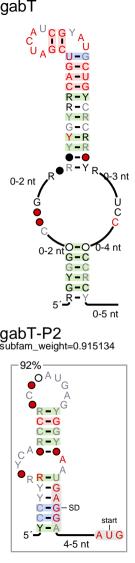


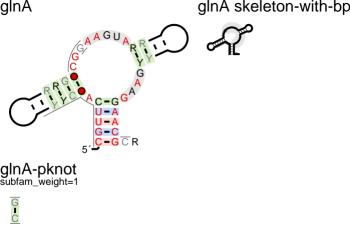


0-3 nt

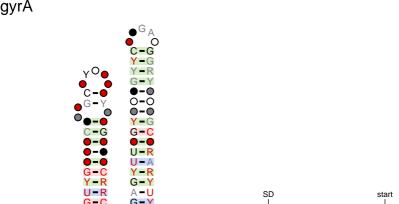
1-3 nt

0-1 nt

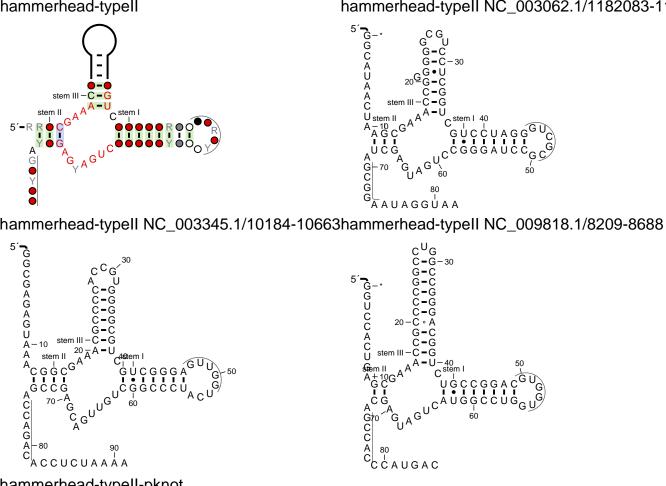


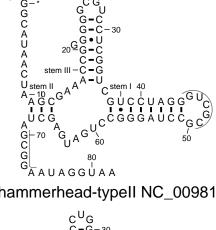


### group-II-DV-DVI zeta' 2-nt bulge lambda<sup>G</sup> - 5 bp kappa branch site catalytic triad 2-26 nt



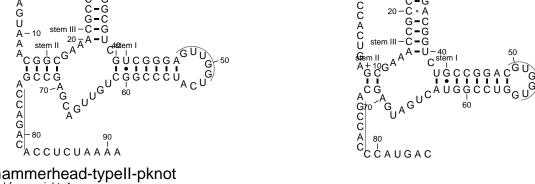
● A G A R ● R ● G G A A 1-8 nt C U Y A U G 5'-OCGURA

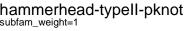




hammerhead-typell NC\_003062.1/1182083-1182558

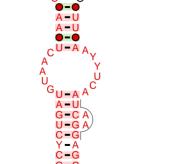








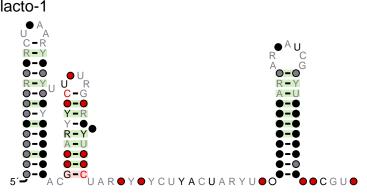
### hopC c<sup>c</sup>A

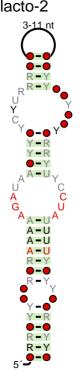


C-G C-G G-C AUCCCAUUGAYAAGGAAAAY•AUG

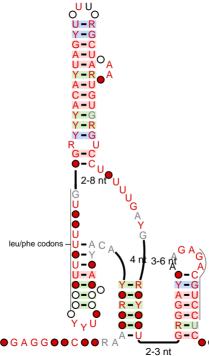
# Y - G R-C G - C Y U G A C G C U C • A C U G R U G C A Y C C A

## lactis-plasmid U - A0-0 A - U A – U A **–** Li A - U A - U A – U G-l A – U A - UA - U A – U 5'-C C A A A A A

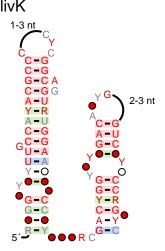




#### leu-phe-leader

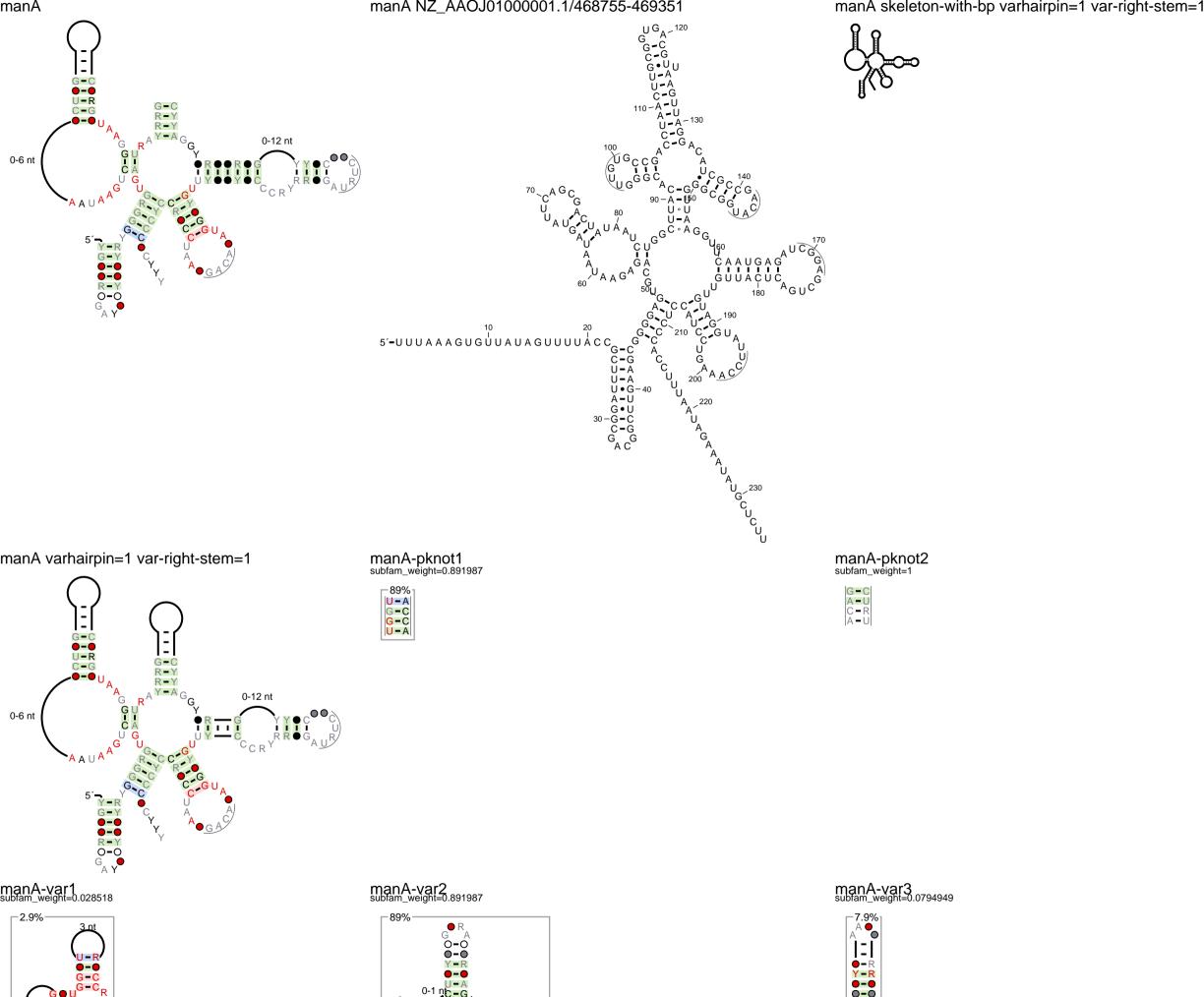


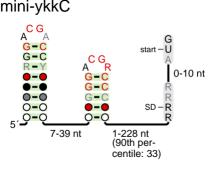
5'-A A U A A • • • • A A • A • • G A G G • • C • • R A A - U G = C • • G G R C G U C U U U U U U



14-23 nt 5′-RRRUAUUU • C-GUUAARUAACAGCUUGRAAYAAAUUUAAAGAAUAAA

Int



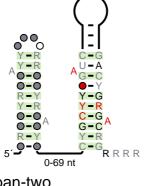


## m Y-R R-R-G = 0 U-C-G C-G O-O ō-ŏ Ŏ-Ċ 0-0 ŏ-ŏ • \_ Ğ-• -R -

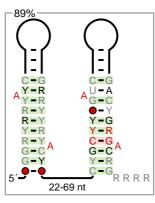
# msiK GC A G G C G U C Y-R-SD Y - A Y - R

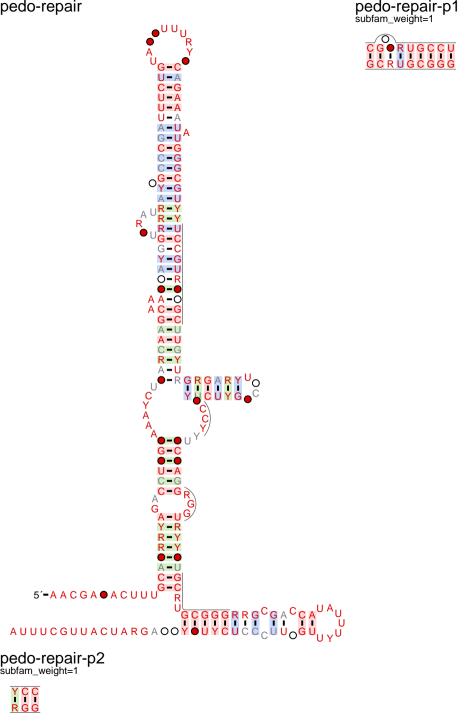
# nuoG Y = R Y - RC-G C-G SD start 5'-G A A U U O U Y G A U U A A C C A O Y U G G A A G C A U G

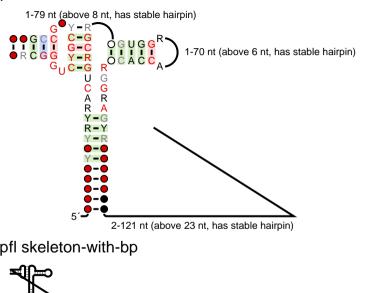
#### pan



#### **pan-two** subfam\_weight=0.893289

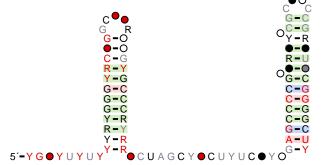




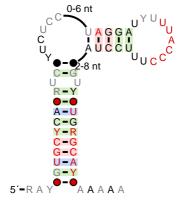


pfl

## pheA

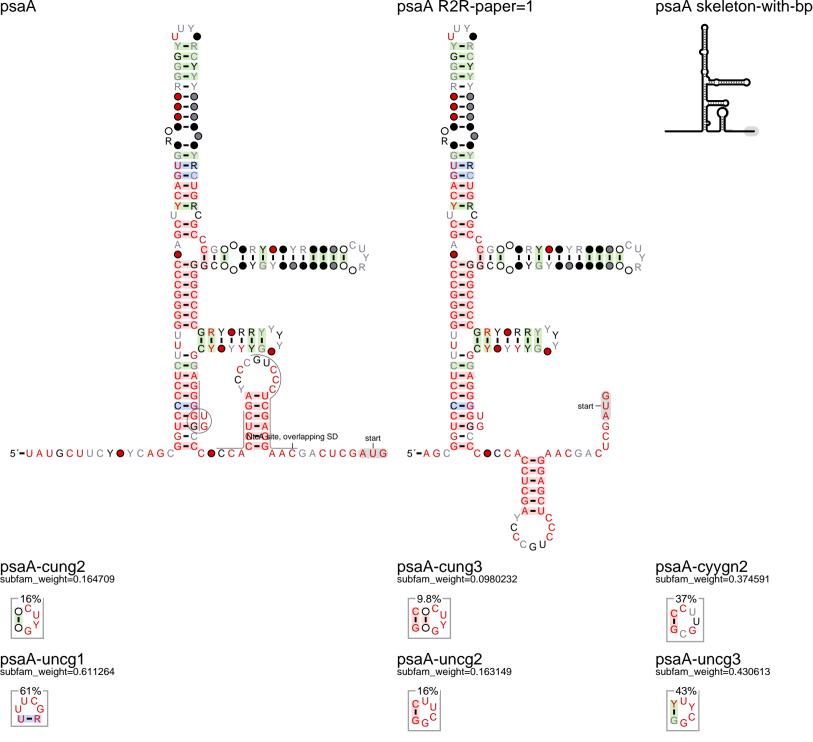


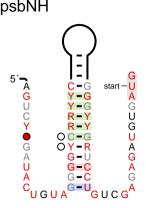
#### potC

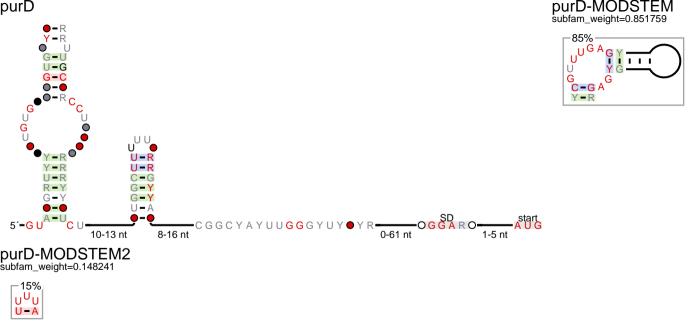


# preQ1-II A O A U G start

5'-URUGYUAUACUORRUAAO







Y - R R-Y G-C C-G Y - R 1-3 nt Y G-C

0-2 nt

12-24 nt

4-7 nt

radC-pknot subfam\_weight=1

radC

rmf

5'-R ● C U Y A G

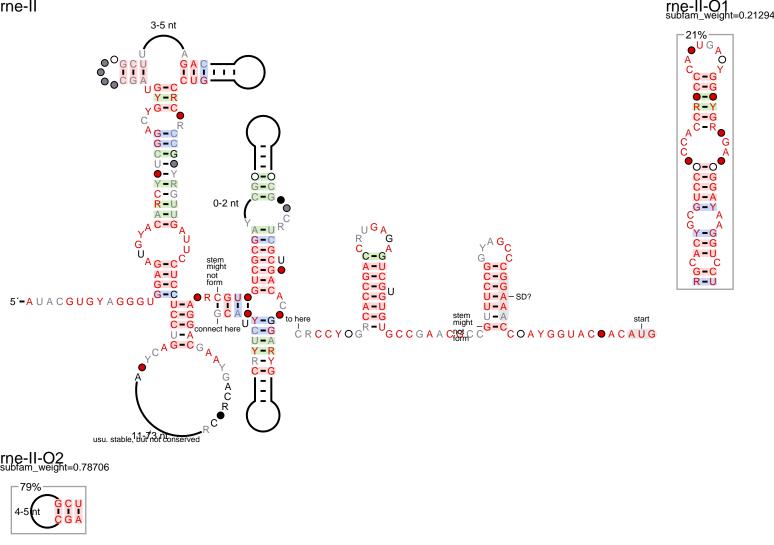
1-5 nt

3-7 nt

1 nt



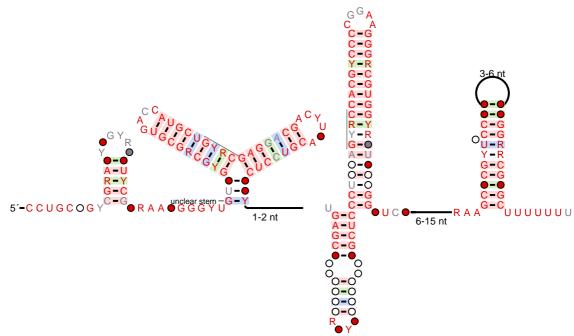
^R ● ● G G G A Y A Y ● A C A G U C A A C A R R U G A G G G C A A Y A C C C U A U G

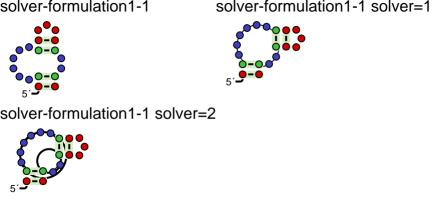


# RROYAUOGAUGCAG

sanguinis-hairpin

sbcD



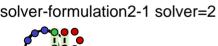




solver-formulation2-1



solver-formulation2-1 solver=1



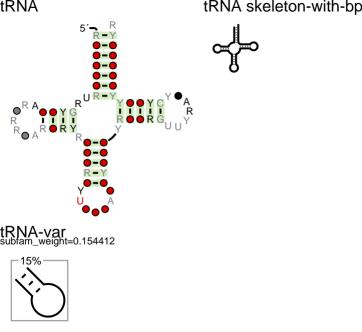
sucA-II O-U C-G U-R G-Y R-U G-Y G-Y Ř-Ú • O C-G Y-O R-U G-Y G **-** C G-C C C=G U=R 0-0 A-U G-C U - G **-**C-G G-C C-G R C C C G G A R G G G C C U C-G G-C 0 0-0 A - U G-C G-C G-C G-C **-**0-0 -R 0-0 Ğ-Y 0-0 0-0 U-R 5, C-G 0-0 A-U Y O G A G G G U G A C C A A G C A U G

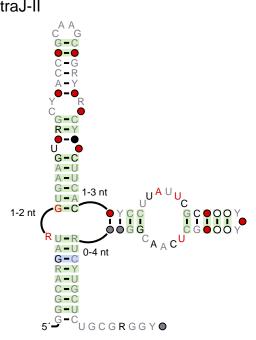
8-13 nt

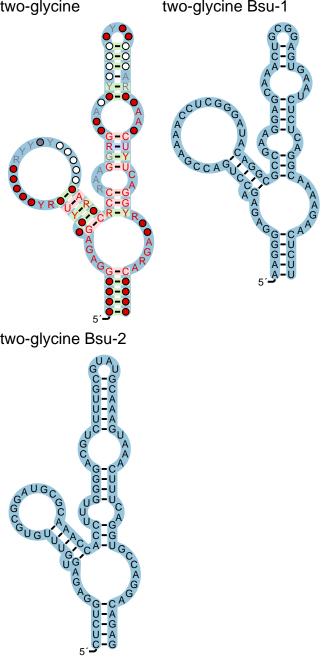
sucA 4-15 nt 3-5 nt

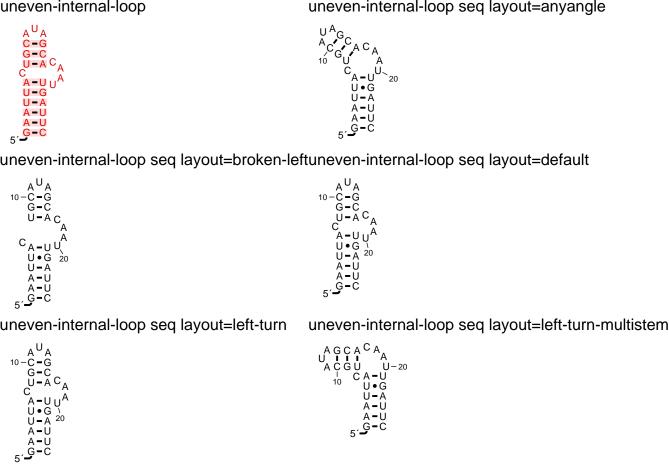
# R-C C - GG-C G - CG - CA A OG C G C A R U A C C U A O A C G A A R A C G G U R A O A G

sucC









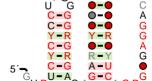
G-C 5'-GUUU<sup>Y-</sup>UGGUGCGGA<sup>Û-</sup>GCCYRGUUU<sup>C-</sup>GUGGCG•GC

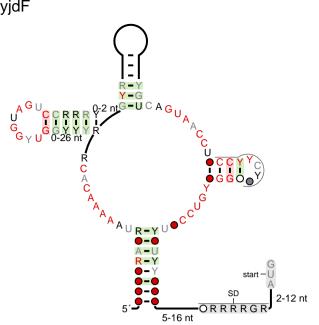


wcaG

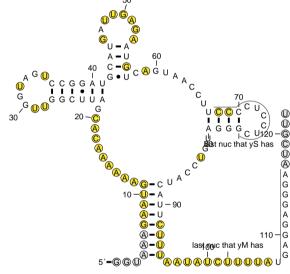
C G R-Y

whalefall-1

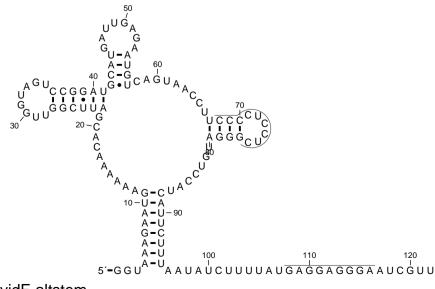




yjdF NC\_000964.2/1274965-1275471:L
Shrinking nucs & bonds using
nucShrinkWithCircleNuc and pairBondScaleWithOneSeq
because circle\_nuc or #=GR ... CLEAVAGE was used
Set these vars to 1 using SetDrawingParam
to disable. See note1 in manual.

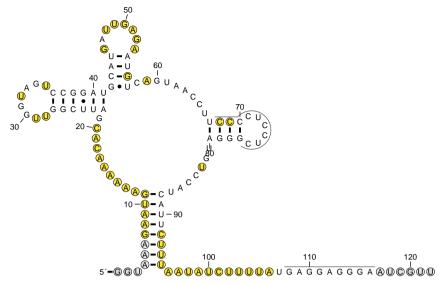


# yjdF NC\_000964.2/1274965-1275471:S

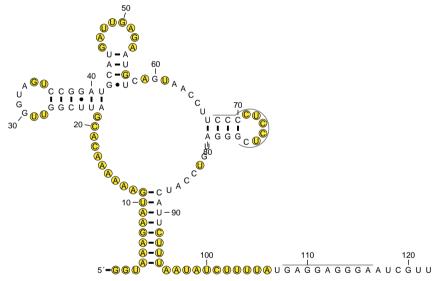


yjdF-altstem subfam\_weight=1

yjdF NC\_000964.2/1274965-1275471 Shrinking nucs & bonds using nucShrinkWithCircleNuc and pairBondScaleWithOneSeq because circle\_nuc or #=GR ... CLEAVAGE was used Set these vars to 1 using SetDrawingParam to disable. See note1 in manual.

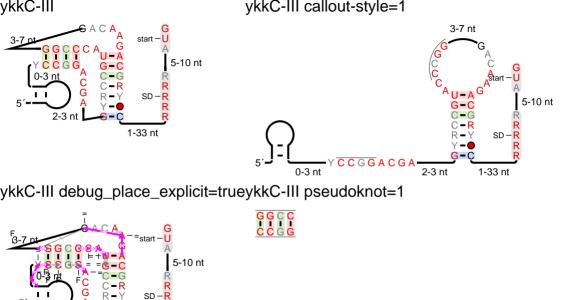


yjdF NC\_000964.2/1274965-1275471:M Shrinking nucs & bonds using nucShrinkWithCircleNuc and pairBondScaleWithOneSeq because circle\_nuc or #=GR ... CLEAVAGE was used Set these vars to 1 using SetDrawingParam to disable. See note1 in manual.



yjdF-AUG subfam\_weight=0.832593





1-33 nt