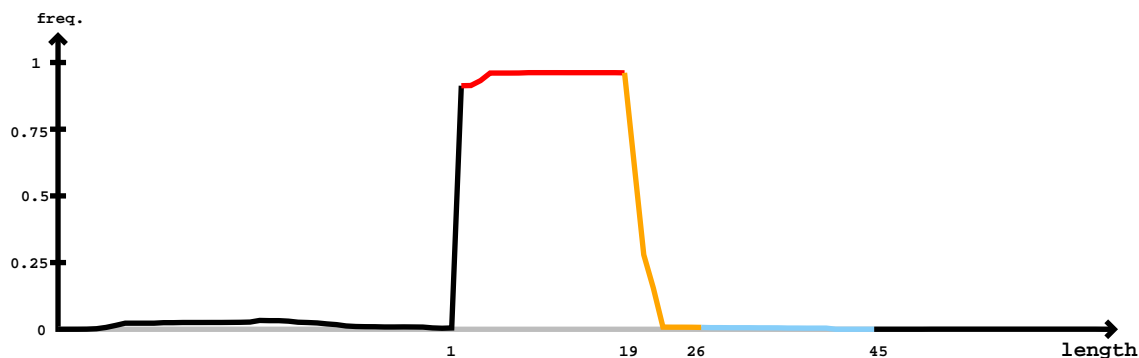


A diagram of an RNA molecule showing a branched structure. The 5' end is on the left, and the 3' end is on the right. The structure consists of several interconnected loops and stems. The nucleotides are represented by letters (A, U, G, C) and are color-coded: red for A and U, green for G, and blue for C. The 5' end is labeled '5'' and the 3' end is labeled '3''.



-3'	exp
uaacggggggaauagcucaaaugguagagcacccgcucgcaugcgggaggguaccgggaucgaaucgccgggauccuccacucucgaccgauucugaagucaaccgagaua	reads mm sample
...(((.(.(((.(.(((((((((.((((....))))).(((.(.((((((.((((....))))).)))))..)))).)))).)))).).....	1 1 s23
.aAggggggaauagcucaaaugg.....	1 0 s23
.cggggggaauagcucaaaugg.....	1 0 s23
.cggggggaauagcucaaaugggua.....	1 0 s23
.cggggggaauagcucaaauggguag.....	1 1 s23
.cggggggaauagcucaaauggguagag.....	1 0 s23
.Aggggggaauagcucaaauggguagagcac.....	1 1 s23
.Aggggggaauagcucaaauggguagagcacc.....	2 1 s23
...Aggggggaauagcucaaauggguag.....	1 1 s23
...Aggggggaauagcucaaauggguaga.....	1 1 s23
...Aggggaauagcucaaaugggua.....	1 1 s23
...Aggggaauagcucaaauggguag.....	1 1 s23
...Aggggaauagcucaaauggguagag.....	2 1 s23
.....auuagcucaaauggguagag.....	2 0 s23
.....Aagcucaaauggguagagc.....	1 1 s23
.....augguagagcacccgcuuGg.....	2 1 s23
.....Aaugcgggagguaccggggauc.....	1 1 s23
.....Augcgggagguaccggggauc.....	1 1 s23
.....Cugcgggagguaccggga.....	2 1 s23
.....augcgggCgguaccggga.....	3 1 s23
.....augcgggagguaccggga.....	170 0 s23
.....augcggAagguaccggga.....	1 1 s23
.....augcgggagguCccggga.....	2 1 s23
.....augcgCgagguaccggga.....	7 1 s23
.....augcgggGgguaccggga.....	1 1 s23
.....augcgggagguaccgggUu.....	1 1 s23
.....augcgggCgguaccggggauc.....	1 1 s23
.....augcgggagguaccggggauc.....	17 0 s23
.....augcgggagguaccggggauc.....	32 0 s23
.....augcgggagguaccggggauc.....	10 1 s23
.....augcgggagguaccggggauc.....	2 1 s23
.....augcgggagguaccggggauc.....	13 0 s23
.....augcgCgagguaccggggauc.....	2 1 s23
.....Acgggagguaccggggauc.....	4 1 s23

## Mature

## Star

uaacgggggguuagcucuaaugguagagcaccgcguucgcaugcgggagguaccgggaucgauaccgggauccuccacucugacacauucugaagucaaccgagaua

.....Acgggagguaccgggaucg.....	4	1	s23
.....Agggagguaccgggaucg.....	5	1	s23
.....agguaccgggaucgauacc.....	1	0	s23
.....auaccgggauccuccacu.....	5	0	s23
.....Aucuugcaccuucugaagucaaccgagau.....	1	1	s23
.....Acugaagucaaccgagau.....	1	1	s23
..aAgggggauuagcucuaaugguagagc.....	1	1	s13
..cgggggauuagcucuaauggua.....	1	0	s13
..Aggggguuagcucuaaugg.....	1	1	s13
..Aggggguuagcucuaauggg.....	1	1	s13
..Aggggguuagcucuaaugguag.....	2	1	s13
.....augguagagcaccgcuu.....	7	0	s13
.....augguagagcaccgcguG.....	3	1	s13
.....augguagagcaAccgcuu.....	1	1	s13
.....augguagagcaccgcuuG.....	3	1	s13
.....augguagagcaccgcuuA.....	2	1	s13
.....Aaugcgggagguaccgggauc.....	2	1	s13
.....augcgggagguCccggga.....	1	1	s13
.....augcgCgagguaccggga.....	4	1	s13
.....augcgggagguaccggga.....	131	0	s13
.....augcgggagguaccgggau.....	1	0	s13
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.....augcgCgagguaccgggauc.....	1	1	s13
.....augcgggagguaccgggauA.....	1	1	s13
.....augcgggagguaccgggauc.....	30	0	s13
.....augcgCgagguaccgggaucg.....	1	1	s13
.....augcgggagUuaccgggaucg.....	1	1	s13
.....augcgggagguaccgggaucg.....	7	0	s13
.....Acgggagguaccgggauc.....	5	1	s13
.....Acgggagguaccgggaucg.....	4	1	s13
.....Agggagguaccgggaucg.....	7	1	s13
.....agguaccgggaucgUuac.....	1	1	s13
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..cgggggauuagcucuaauggg.....	1	0	s72
..cgggggauuagcucuaaugguagag.....	2	0	s72
..cgggggauuagcucuaaugguagagc.....	1	0	s72
..Agggggauuagcucuaaugguagagcacc.....	2	1	s72
..Aggggguuagcucuaaugg.....	3	1	s72
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..Aggggguuagcucuaaugguaga.....	3	1	s72
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.....augcgggagguaccAgga.....	3	1	s72
.....augcgggagguGccggga.....	2	1	s72
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.....Cugcgggagguaccggga.....	3	1	s72
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.....augcgggagguaccgggauU.....	5	1	s72
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.....augcgggagguaccgggauc.....	125	0	s72
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.....augcgggagguGccgggaucg.....	1	1	s72
.....augcgggaCguaccgggaucg.....	1	1	s72
.....augcgCgagguaccgggaucg.....	1	1	s72
.....augcgggagguCccgggaucg.....	2	1	s72

# Mature Star

uaacggggggaauagcucaaaugguagagcaccgcgcuaucgcaugcgggagguaaccgggaucgauaccgggaucuccacucucugacacauucugaagucacccgagaua			
.....augcgggagguaaccgggaucg.....	163	0	s72
.....augcgggagguaaccgggaucgauac.....	1	0	s72
.....augcgggagguaaccgggaucgauaccgggau.....	1	0	s72
.....augcgggagguaaccgggaucgGuaccgggaucucc.....	1	1	s72
.....Cgcgggagguaaccgggaucg.....	1	1	s72
.....Agcgggagguaaccgggaucgauaccgggaucucc.....	1	1	s72
.....Acgggagguaaccgggauc.....	4	1	s72
.....Acgggagguaaccgggaucg.....	13	1	s72
.....Agggagguaaccgggaucg.....	62	1	s72
.....auaccgggaucuccacC.....	9	1	s72
..aAgggggaauagcucaaaugg.....	1	1	s85
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..Agggggaauagcucaaaug.....	5	1	s85
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.....Aggcucaaaugguagagc.....	1	1	s85
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.....augcgggagguaaccgggC.....	3	1	s85
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.....augcgggaagguaaccggga.....	1	1	s85
.....augcgUgagguaaccggga.....	1	1	s85
.....augcgggGgguaaccggga.....	2	1	s85
.....augcgggagAuaccggga.....	1	1	s85
.....augcgggCgguaaccggga.....	9	1	s85
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.....augcgggagguaaccgggau.....	101	0	s85
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.....augcgggagguaaccAggauc.....	1	1	s85
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.....augcgggCgguaaccgggauc.....	2	1	s85
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.....augcgggagguaaccgggaucC.....	1	1	s85
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.....augcgggagguaaccgggaucgauaccgggauccu.....	1	0	s85

## Mature

## Star

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.....Cgcgggagguaccgggaucg.....	3	1	s85
.....Acgggagguaccgggauc.....	21	1	s85
.....Acgggagguaccgggaucg.....	34	1	s85
.....Ccgggagguaccgggaucg.....	1	1	s85
.....Agggagguaccgggaucg.....	89	1	s85
.....auacccggauccuccacA.....	1	1	s85
.....auacccggauccuccacC.....	3	1	s85
.....auacccggauccuccacu.....	1	0	s85
..acgggggguuagcucaaa.....	2	0	s35
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..Aggggguuagcucaaaug.....	1	1	s35
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..Aggggguuagcucaaaugguaga.....	2	1	s35
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.....Aagcucaaauggguagagc.....	2	1	s35
.....aGugguagagcaccgcguu.....	3	1	s35
.....augguagagcaccgcguu.....	1	0	s35
.....augguagagcaccgcguuG.....	4	1	s35
.....augguagagcaccgcguuGg.....	6	1	s35
.....accgcguuAgcaugcgggaggu.....	2	1	s35
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.....Aaugcgggagguaccggg.....	2	1	s35
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.....Aaugcgggagguaccgggauc.....	2	1	s35
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.....Agggagguaccgggaucg.....	8	1	s35
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.....augguagagcaccgcguu.....	1	1	s09
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.....augcgggCgguaccggga.....	1	1	s09

# Mature Star

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.....augcgCgagguaccggga.....	1	1	s09
.....augcgggagguaccggga.....	66	0	s09
.....augcgggagguaccgggau.....	6	0	s09
.....augcgggCgguaaccgggauc.....	1	1	s09
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.....auacccggauccccacA.....	1	1	s60
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.....cggggggaauagcucaaaugguagagc.....	1	0	s52
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## Mature

## Star

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...Aggggauuagcucaaaug				s52
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...Aggggauuagcucaaaugg				s52
...Aggggauuagcucaaauggu				s52
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...Aggggauuagcucaaaugguag				s52
...Aggggauuagcucaaaugguaga				s52
...Aggggauuagcucaaaugguagag				s52
...auuagcucaaaugguaga				s52
...auuagcucaaaugguagag				s52
...auuagcucaaaugguagagc				s52
...Auucgcaugcgggagguaccgggauc				s52
...Aucgcaugcgggagguaccggga				s52
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...Cugcgggagguaccggga				s52
...augcgggagguaccggga	226	0		s52
...augcgCgagguaccggga	3	1		s52
...aGcgggagguaccggga	2	1		s52
...augcgggagguaccgggau	40	0		s52
...augcgggagguaccgggauU	3	1		s52
...augcgggagguaccgggauc	41	0		s52
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...auaccggaucuccacC	4	1		s52