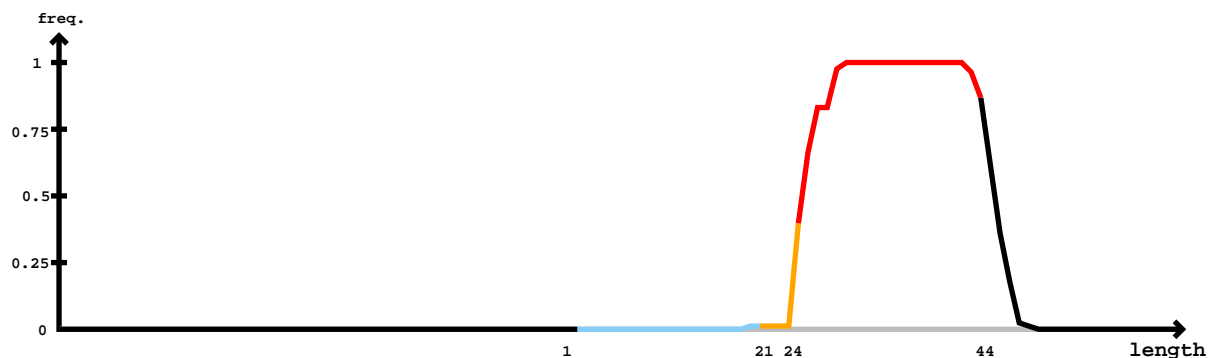


The diagram illustrates the cloverleaf secondary structure of a tRNA molecule. The 5' end is labeled '5'' and the 3' end is labeled '3''. The structure consists of several stems and loops. The acceptor stem is at the top left, formed by a G-C pair. The D arm is a small loop on the left. The anticodon arm is at the bottom, with the anticodon sequence 3'-GCG-5' (G, C, G). The T arm is a small loop on the right. The molecule is colored with blue for the acceptor stem and D arm, red for the anticodon arm, and yellow for the T arm.



| | | | | |
|-----|--|-------|-----|--------|
| 5'- | gauuaaacagcguuuuuauuguccuacuuugggaggugucguuacuaaaaaacuaagcauaauuagcccuuaaaucuuucucucucgggcuaaauuuuguuuuaaggacguuaaccuucc | -3' | exp | |
| |((((.....))).....(((((((.....(((((((.....)))))))))).....)))))).....)))))) | reads | mm | sample |
| |cuucucgggcuaaGauuuugu..... | 1 | 1 | s02 |
| |cuucucgAgcuaauuuugu..... | 1 | 1 | s02 |
| |cuucucgggcuaaauuuugu..... | 4 | 0 | s02 |
| |cuucucgggcuaaauuuuguu..... | 1 | 0 | s02 |
| |cuucucgggcuaaauuuuguA..... | 1 | 1 | s02 |
| |uucucgggcuaaauuuuguA..... | 1 | 1 | s02 |
| |uucucgggcuaaauuuuguuu..... | 2 | 0 | s02 |
| |uucucgggcuaaauuuuguuuu..... | 1 | 0 | s02 |
| |ucgggcuaaauuuuguuuu..... | 2 | 0 | s02 |
| |ucgggcuaaauuuuguuuuu..... | 1 | 0 | s02 |
| |ucgggcuaaauuuuguuuuu..... | 1 | 0 | s16 |
| |uucucgggcuaaauuuuguuu..... | 3 | 0 | s14 |
| |cuucucgggcuaaauuuugu..... | 7 | 0 | s19 |
| |uucucgggcuaaauuuuguuu..... | 2 | 0 | s19 |
| |ucucgggcuaaauuuuguuu..... | 1 | 0 | s19 |
| |ucgggcuaaauuuuguuuuu..... | 6 | 0 | s19 |
| |ucgggcuaaauuuuguuuua..... | 1 | 0 | s19 |
| |cuucucgAgcuaaauuuugu..... | 1 | 1 | s08 |
| |cuucAcgggcuaaauuuu..... | 1 | 1 | s13 |
| |cuucucgggcuaaauuuugu..... | 3 | 0 | s13 |
| |ucucgggcuaaauuuAguuu..... | 1 | 1 | s13 |
| |ucucgggcuaaauuuuguuu..... | 4 | 0 | s13 |
| |ucucgggcuaaauuuuguuuuA..... | 1 | 1 | s13 |
| |cgggcuaaauuuuguuuuaa..... | 1 | 0 | s13 |
| |cuucucuucucgggcuaaauuuugu..... | 1 | 0 | s07 |
| |uucucgggcuaaauuuug..... | 3 | 0 | s07 |
| |uucucgggcuaaauuuuguu..... | 4 | 0 | s07 |
| |cuucucgggcuaaauuuugu..... | 2 | 0 | s12 |

Star

Mature

| | | | | | | |
|---|------------------------|--------------------|--|---|-----|--|
| gauuaaacagcguuuuuuuguccuacuuuggaggggucguuacuaaaaaacua | gc | cauauuagcccuuaaauc | ucucucucgggcuaauuuuguuuuuaaggacguuaaccuucc | | | |
| ..... | uucucgggcuaauuuuguu | ..... | 1 | 0 | s12 | |
| ..... | ucucgggcuaauuuuguuu | ..... | 3 | 0 | s12 | |
| ..... | ucucgggcuaauuuuguuuu | ..... | 1 | 0 | s12 | |
| ..... | cuucucgggcuaauuuugu | ..... | 1 | 0 | s17 | |
| ..... | cuucucgggcuaauuuugC | ..... | 2 | 1 | s17 | |
| ..... | uucucgggcuaauuuug | ..... | 1 | 0 | s03 | |
| ..... | cuucucgggcuaauuuu | ..... | 2 | 0 | s01 | |
| ..... | cuucucgggcuaauuuug | ..... | 1 | 0 | s01 | |
| ..... | cuucucgggcuaauuuuguu | ..... | 3 | 0 | s01 | |
| ..... | ucucgggcuaauuuuguuu | ..... | 2 | 0 | s01 | |
| ..... | ucgggcuaauuuuguuuu | ..... | 1 | 0 | s01 | |
| ..... | cgggcuaauuuuguuuu | ..... | 1 | 0 | s01 | |
| ..... | uucucgggcuaauuuug | ..... | 3 | 0 | s06 | |
| ..... | uucucgggcuaauuuugC | ..... | 1 | 1 | s06 | |
| ..... | ucucgggcuaauuuuguuu | ..... | 1 | 0 | s06 | |
| ..... | cuucucgggcuaauuuuguuuu | ..... | 1 | 0 | s10 | |