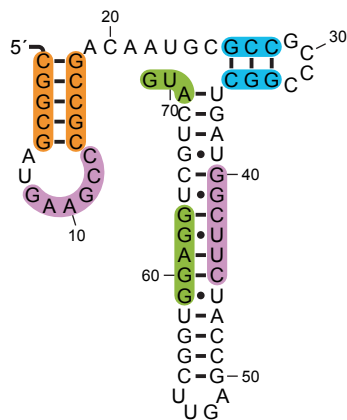


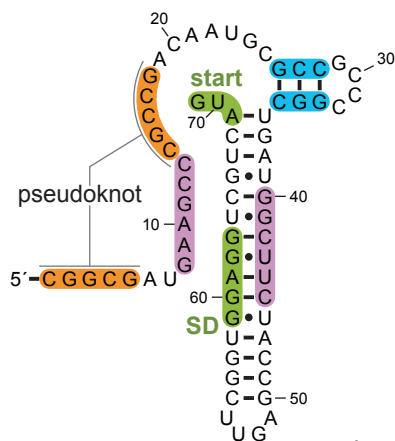
A

Secondary structure diagram of the 16S rRNA gene. The diagram shows a complex RNA fold with various stems and loops. Key regions are highlighted: the 5' leader sequence (5'-GGGCGAU-3') is orange; the 16S rRNA gene sequence (5'-UACCGAGUU-3') is purple; the 23S rRNA gene sequence (5'-UACCGAGUU-3') is green; and the 16S rRNA gene sequence (5'-UACCGAGUU-3') is blue. The diagram is labeled with nucleotide positions 10, 20, 30, 40, 50, 60, 70, and 80. The 16S rRNA gene sequence is shown in the center, flanked by the 23S rRNA gene sequence on the right and the 16S rRNA gene sequence on the left. The 5' leader sequence is at the top left, and the 3' end is at the bottom right.



B

Secondary structure of the 5' UTR of the 16S rRNA of *E. coli*. The diagram shows a pseudoknot (orange), an alternative stem (alt. stem, purple), and a start codon (green) followed by a Shine-Dalgarno (SD) sequence (green). The sequence is 5'-GGGCGAUAUACCGAGUUC-3'. The pseudoknot is formed by a base pair between the 5' G and the 10th U. The alt. stem is formed by a base pair between the 11th A and the 14th U. The start codon is GUA at positions 67-69. The SD sequence is GAGG at positions 70-73.



C

5'-GGGAUUGUGUAGACUG

pseudoknot

terminator

10 20 30 40 50 60 70

