

The diagram illustrates a tRNA molecule in its cloverleaf conformation. The acceptor stem at the top is labeled with 'A' and 'U'. The D arm contains a dihydrouridine (D) residue, represented by a red circle. The anticodon arm at the bottom features the anticodon sequence GAC, shown as red circles. The TΨC arm contains a pseudouridine (Ψ) residue, represented by a yellow circle. The variable loop is located between the D and TΨC arms. The tRNA is shown pairing with an mRNA codon UAC, which is represented by red circles. The base pairing is indicated by lines connecting the tRNA anticodon (GAC) to the mRNA codon (UAC). The 5' end of the tRNA is labeled '5'-' and the 3' end of the mRNA is labeled '3'-'.