Codon Chart

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These charts allow you to use an mRNA sequence and determine the proper amino acid that corresponds to the codon. If you have a DNA sequence, you will have to transcribe it into an mRNA codon first.

Second letter

First letter	U	C	A	G	Third letter
U	UUU, UUC: Phe UUA, UUG: Leu	UCU, UCC, UCA, UCG: Ser	UAU, UAC: Tyr **UAA Stop** **UAG Stop**	UGU, UGC: Cys **UGA Stop** UGG Trp	U C A G
C	CUU, CUC, CUA, CUG: Leu	CCU, CCC, CCA, CCG: Pro	CAU, CAC: His CAA, CAG: Gln	CGU, CGC, CGA, CGG: Arg	U C A G
A	AUU, AUC, AUA: Ile AUG Met	ACU, ACC, ACA, ACG: Thr	AAU, AAC: Asn AAA, AAG: Lys	AGU, AGC: Ser AGA, AGG: Arg	U C A G
G	GUU, GUC, GUA, GUG: Val	GCU, GCC, GCA, GCG: Ala	GAU, GAC: Asp GAA, GAG: Glu	GGU, GGC, GGA, GGG: Gly	U C A G

How to read the codon chart

1. Find the first letter of the codon triplet from the left side of the table.
2. Find the second letter of the codon triplet from the upper axis of the table.
3. Locate the intersect box of 1st row and 2nd column in the codon table.
4. Find the third letter of the codon triplet in the box. You will see the corresponding amino acid.
5. UAA, UAG, and UGA are Stop codons.

To learn more, visit rsscience.com/codon-chart