

Anticodon chart · standard genetic code

Each mRNA codon 5' → 3', the tRNA anticodon that pairs with it 3' → 5', and the amino acid. NCBI translation table 1. CodonChart.com

1st base		SECOND BASE												3rd base	
		U			C			A			G				
U	UUU	AAA	Phe	UCU	AGA	Ser	UAU	AUA	Tyr	UGU	ACA	Cys	U		
	UUC	AAG	Phe	UCC	AGG	Ser	UAC	AUG	Tyr	UGC	ACG	Cys	C		
	UUA	AAU	Leu	UCA	AGU	Ser	UAA	—	Stop	UGA	—	Stop	A		
	UUG	AAC	Leu	UCG	AGC	Ser	UAG	—	Stop	UGG	ACC	Trp	G		
C	CUU	GAA	Leu	CCU	GGA	Pro	CAU	GUA	His	CGU	GCA	Arg	U		
	CUC	GAG	Leu	CCC	GGG	Pro	CAC	GUG	His	CGC	GCG	Arg	C		
	CUA	GAU	Leu	CCA	GGU	Pro	CAA	GUU	Gln	CGA	GCU	Arg	A		
	CUG	GAC	Leu	CCG	GGC	Pro	CAG	GUC	Gln	CGG	GCC	Arg	G		
A	AUU	UAA	Ile	ACU	UGA	Thr	AAU	UUA	Asn	AGU	UCA	Ser	U		
	AUC	UAG	Ile	ACC	UGG	Thr	AAC	UUG	Asn	AGC	UCG	Ser	C		
	AUA	UAU	Ile	ACA	UGU	Thr	AAA	UUU	Lys	AGA	UCU	Arg	A		
	AUG	UAC	Met	ACG	UGC	Thr	AAG	UUC	Lys	AGG	UCC	Arg	G		
G	GUU	CAA	Val	GCU	CGA	Ala	GAU	CUA	Asp	GGU	CCA	Gly	U		
	GUC	CAG	Val	GCC	CGG	Ala	GAC	CUG	Asp	GGC	CCG	Gly	C		
	GUA	CAU	Val	GCA	CGU	Ala	GAA	CUU	Glu	GGA	CCU	Gly	A		
	GUG	CAC	Val	GCG	CGC	Ala	GAG	CUC	Glu	GGG	CCC	Gly	G		
Nonpolar Polar Acidic Basic Stop															

■ Nonpolar
 ■ Polar
 ■ Acidic
 ■ Basic
 ■ Stop

In each cell: codon, anticodon (blue), amino acid. The anticodon is written 3' → 5' to line up under the codon; tRNA names write it 5' → 3', reversed.

Stop codons (—) have no tRNA: release factors end translation. Pairing only; which tRNAs a cell carries: codonchart.com/anticodon