Table of Standard Genetic Code

www.vaxasoftware.com

This table shows the codons and the amino acid for each. The direction of the mRNA is 5' to 3'

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

Inverse table of Standard Genetic Code

This table shows the amino acid and the codons for each. The direction of the mRNA is 5' to 3'

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

Key	**Nonpolar**	**Polar**	**Basic**	**Acidic**

www.vaxasoftware.com

Table of standard amino acid abbreviations

www.vaxasoftware.com

Ala	**Alanine**	**Leu**	**Leucine**
Arg	**Arginine**	**Lys**	**Lysine**
Asn	**Asparagine**	**Met**	**Methionine**
Asp	**Aspartic acid**	**Phe**	**Phenylalanine**
Cys	**Cysteine**	**Pro**	**Proline**
Gln	**Glutamine**	**Ser**	**Serine**
Glu	**Glutamic acid**	**Thr**	**Threonine**
Gly	**Glycine**	**Trp**	**Tryptophan**
His	**Histidine**	**Tyr**	**Tyrosine**
Ile	**Isoleucine**	**Val**	**Valine**

Key	
	Essential amino acids in human nutrition.
	Essential amino acids only in certain cases in human nutrition.

www.vaxasoftware.com