Codon Table (Standard)

| | | Second | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | U | | C | | A | | G | |
| First | U | UUU | Phe(F) | UCU | Ser(S) | UAU | Tyr(Y) | UGU | Cys(C) |
| | | UUC | | UCC | | UAC | | UGC | |
| | | UUA | Leu(L) | UCA | | UAA | STOP | UGA | STOP |
| | | UUG | | UCG | | UAG | STOP | UGG | Trp(W) |
| | C | CUU | | CCU | Pro(P) | CAU | His(H) | CGU | Arg(R) |
| | | CUC | | CCC | | CAC | | CGC | |
| | | CUA | | CCA | | CAA | Gln(Q) | CGA | |
| | | CUG | | CCG | | CAG | | CGG | |
| | A | AUU | Ile(I) | ACU | Thr(T) | AAU | Asn(N) | AGU | Ser(S) |
| | | AUC | | ACC | | AAC | | AGC | |
| | | AUA | | ACA | | AAA | Lys(K) | AGA | Arg(R) |
| | | AUG | Met(M) | ACG | | AAG | | AGG | |
| | G | GUU | Val(V) | GCU | Ala(A) | GAU | Asp(D) | GGU | Gly(G) |
| | | GUC | | GCC | | GAC | | GGC | |
| | | GUA | | GCA | | GAA | Glu(E) | GGA | |
| | | GUG | | GCG | | GAG | | GGG | |

Reverse Codon Table

| | | | | | |
|---|---|---|---|---|---|
| Phe(F) | UUY | Phenylalanine | His(H) | CAY | Histidine |
| Leu(L) | UUR, CUN | Leucine | Gln(Q) | CAR | Glutamine |
| Ile(I) | AUY, AUA | Isoleucine | Asn(N) | AAY | Asparagine |
| Met(M) | AUG | Methionine | Lys(K) | AAR | Lysine |
| Val(V) | GUN | Valine | Asp(D) | GAY | Aspartic acid |
| Ser(S) | UCN, AGY | Serine | Glu(E) | GAR | Glutamic acid |
| Pro(P) | CCN | Proline | Cys(C) | UGY | Cysteine |
| Thr(T) | ACN | Threonine | Trp(W) | UGG | Tryptophan |
| Ala(A) | GCN | Alanine | Arg(R) | CGN, AGR | Arginine |
| Tyr(Y) | UAY | Tyrosine | Gly(G) | GGY | Glycine |

| | | |
|---|---|---|
| STOP | UAR, UGA | Amber (UAG), Ochre (UAA), Opal (UGA) |
| Asx(B) | AAY, GAY | Aspartic acid (Asp) or Asparagines (Asn) |
| Glx(Z) | CAR, GAR | Glutamic acid (Glu) or Glutamine (Gln) |
| fMet | AUG | Formylmethionine |
| Sec(U) | UAG | Selenocysteine |
| | UAG | Pyrrolysine |