

Function Finders

Web activity sheet



Translate these sequences to find out their function at:

www.ebi.ac.uk/training/schools/relate/

DNA Sequence 1: atg aag tca gct att tta acc ggt ttg ctt ttc gtc

Translated sequence: _____

Protein name: _____

Protein function: _____

DNA Sequence 2: atg agt aaa gga gaa gaa ctt ttc act gga gtc gtt

Translated sequence: _____

Protein name: _____

Protein function: _____

DNA Sequence 3: gaa aac atg gag aac gat gaa aat att gtg tat ggt

Translated sequence: _____

Protein name: _____

Protein function: _____

DNA Sequence 4: ggt tgg gct ttg cgg atc atg ttt cta cat ctg tac

Translated sequence: _____

Protein name: _____

Protein function: _____

DNA Sequence 5: atg gag ctg gcg gcc ttg tgc cgc tgg ggg tta ctc

Translated sequence: _____

Protein name: _____

Protein function: _____

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DNA Sequence 6: cct ggg gag aac cta tgc tat aga aag atg tgg tgc

Translated sequence: _____

Protein name: _____

Protein function: _____

DNA Sequence 7: ccc aga gag atc cag acc gcc gtg aga ctg tta ctc

Translated sequence: _____

Protein name: _____

Protein function: _____

DNA Sequence 8: cca ggt gga gaa aag gag act tcg gct acc cag aga

Translated sequence: _____

Protein name: _____

Protein function: _____

DNA Sequence 9: gag aag aga aag ctg ttt atc cgt tcc atg ggt gaa

Translated sequence: _____

Protein name: _____

Protein function: _____

DNA Sequence 10: atg agt tct gac tct gag atg gcc att ttt ggg gag

Translated sequence: _____

Protein name: _____

Protein function: _____

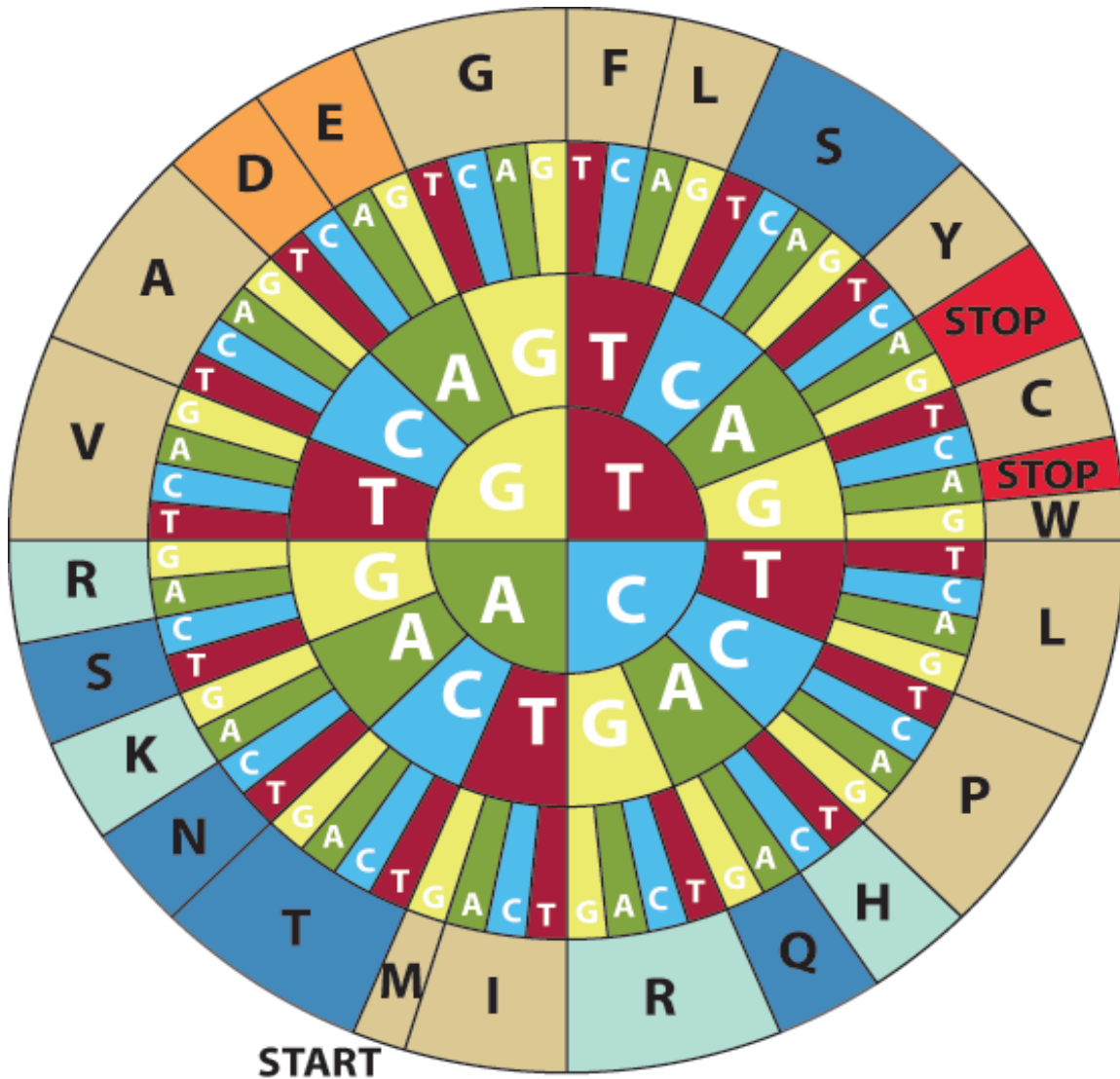
Codon Wheel

Decoding DNA

Use the codon wheel to translate DNA codons into amino acids.

To decode a codon find the first letter of your sequence in the inner circle and work outwards to see the corresponding amino acid. For example: CAT codes for H (Histidine).

*Please note that this wheel uses the sense DNA codons (5' to 3').



Amino acid code

| | | | |
|-------------------|----------------|----------------|----------------|
| A - Alanine | G - Glycine | M - Methionine | S - Serine |
| C - Cysteine | H - Histidine | N - Asparagine | T - Threonine |
| D - Aspartic Acid | I - Isoleucine | P - Proline | V - Valine |
| E - Glutamic acid | K - Lysine | Q - Glutamine | W - Tryptophan |
| F - Phenylalanine | L - Leucine | R - Arginine | Y - Tyrosine |

Image: C. Brooksbank, European Bioinformatics Institute