

Transcription and Translation

Practice Worksheet

Example:

DNA : G T A C G C G T A T A C C G A C A T T C

mRNA: C A U G C G C A U A U G G C U G U A A G

Codons: AUG-CGC-AUA-UGG-CUG-UAA

Anticodons: UAC-GCG-UAU-ACC-GAC-AUU

Amino Acids: METHIONINE-ARGININE-ISOLEUCINE-TRYPTOPHAN-LEUCINE

Using the example above, transcribe the following DNA strand into mRNA and translate that strand into a polypeptide chain, identifying the codons, anticodons, and amino acid sequence.

1. DNA: A T A C G A A A T C G C G A T C G C G G C G A T T C G G

mRNA:

Codon:

Anticodon:

Amino Acids:

2. DNA: T T T A C G G C C A T C A G G C A A T A C T G G

mRNA:

Codon:

Anitcodon:

Amino Acids:

3. DNA: TACGGGCCTATACGCTACTACTCATGGATCGG

mRNA:

Codon:

Anticodon:

Amino Acids:

4. DNA: GTACGCGTATACCGACATTC

mRNA:

Codon:

Anticodon:

Amino Acids:

Transcribe the following DNA strand into mRNA and translate that strand into a polypeptide chain, identifying the codons, anticodons, and amino acid sequence.

DNA: CGATACAATGGACCCGGTATGCGATATCC