

Transcription, Translation, and Codon Chart Practice

| First Letter | Second Letter | | | | Third Letter |
|--------------|-----------------------|-----------|------------|------------|--------------|
| | U | C | A | G | |
| U | phenylalanine | serine | tyrosine | cysteine | U |
| | phenylalanine | serine | tyrosine | cysteine | C |
| | leucine | serine | stop | stop | A |
| | leucine | serine | stop | tryptophan | G |
| C | leucine | proline | histidine | arginine | U |
| | leucine | proline | histidine | arginine | C |
| | leucine | proline | glutamine | arginine | A |
| | leucine | proline | glutamine | arginine | G |
| A | isoleucine | threonine | asparagine | serine | U |
| | isoleucine | threonine | asparagine | serine | C |
| | isoleucine | threonine | lysine | arginine | A |
| | (start) methionine | threonine | lysine | arginine | G |
| G | valine | alanine | aspartate | glycine | U |
| | valine | alanine | aspartate | glycine | C |
| | valine | alanine | glutamate | glycine | A |
| | valine | alanine | glutamate | glycine | G |

DNA Sequence:

1. ATGAAAAACAAGGTACACATCTAG

mRNA:

amino Acids:

2. ATGAAAAACAATTGCACGTAG

mRNA:

amino Acids:

3. ATGTAAACCACACTACATAG

mRNA:

amino Acids:

4. ATGAGAAGTAGGAGAAGCATAATCTAG

mRNA:

amino Acids:

5. ATGATTCAACACATCCAGCCACATTAG

mRNA:

amino Acids:

6. ATGCCCCCGAGAAGCCTTAG

mRNA:

amino Acids:

7. ATGCGACGCCGGCGTAG

mRNA:

amino Acids:

8. ATGCTACTCATAGATCTGCTTTAG