

# Mutation Practice

## Original Transcript Code

mRNA - 5' – U C C G A U G U C C C G A G G U G C C U A C A G A C A A U G A C C G G A U A A C – 3'

Protein sequence – \_\_\_\_\_

## Point Mutants:

1) mRNA - 5' – U C C G A U G U C C C G A G G U **A** C C U A C A G A C A A U G A C C G G A U A A C – 3'

Protein sequence – \_\_\_\_\_

Type of mutation: mis-sense / nonsense / silent    insertion / deletion / substitution    Frame Shift? Y / N

2) mRNA - 5' – U C C G A U G U C C C G A G G U **A** G C C U A C A G A C A A U G A C C G G A U A A C – 3'

Protein sequence – \_\_\_\_\_

Type of mutation: mis-sense / nonsense / silent    insertion / deletion / substitution    Frame Shift? Y / N

3) mRNA - 5' – **U C G** A U G U C C C G A G G U G C C U A C A G A C A A U G A C C G G A U A A C – 3'

Protein sequence – \_\_\_\_\_

Type of mutation: mis-sense / nonsense / silent    insertion / deletion / substitution    Frame Shift? Y / N

4) mRNA - 5' – U C C G A U G U C **U** C G A G G U G C C U A C A G A C A A U G A C C G G A U A A C – 3'

Protein sequence – \_\_\_\_\_

Type of mutation: mis-sense / nonsense / silent    insertion / deletion / substitution    Frame Shift? Y / N

5) mRNA - 5' – U C C G A **C G** U G U C C C G A G G U G C C U A C A G A C A A U G A C C G G A U A A C – 3'

Protein sequence – \_\_\_\_\_

Type of mutation: mis-sense / nonsense / silent    insertion / deletion / substitution    Frame Shift? Y / N

6) mRNA - 5' – U C C G A U G U C C C G A **G U A** G G U G C C U A C A G A C A A U G A C C G G A U A A C – 3'

Protein sequence – \_\_\_\_\_

Type of mutation: mis-sense / nonsense / silent    insertion / deletion / substitution    Frame Shift? Y / N

# Mutation Practice

## Original Transcript Code

mRNA - 5' - A G G C U A U G A A G C A U A U C C G A U U A G U C U G A G G U A G A - 3'

Protein sequence - \_\_\_\_\_

## Point Mutants:

1) mRNA - 5' - A G G C U A U G A A G C A U A U **U** C G A U U A G U C U G A G G U A G A - 3'

Protein sequence - \_\_\_\_\_

Type of mutation: mis-sense / nonsense / silent    insertion / deletion / substitution    Frame Shift? Y / N

2) mRNA - 5' - A G G C U A U G A A G C A U A U C C G A U U A G U C U G **C** A G G U A G A - 3'

Protein sequence - \_\_\_\_\_

Type of mutation: mis-sense / nonsense / silent    insertion / deletion / substitution    Frame Shift? Y / N

3) mRNA - 5' - A G G C U A U G **U U C** A A G C A U A U C C G A U U A G U C U G A G G U A G A - 3'

Protein sequence - \_\_\_\_\_

Type of mutation: mis-sense / nonsense / silent    insertion / deletion / substitution    Frame Shift? Y / N

4) mRNA - 5' - A G G C U A U G A A G C A U A U C C G A **U A G** U C U G A G G U A G A - 3'

Protein sequence - \_\_\_\_\_

Type of mutation: mis-sense / nonsense / silent    insertion / deletion / substitution    Frame Shift? Y / N

5) mRNA - 5' - A G G C U A U G A A G C A U **G G** A U C C G A U U A G U C U G A G G U A G A - 3'

Protein sequence - \_\_\_\_\_

Type of mutation: mis-sense / nonsense / silent    insertion / deletion / substitution    Frame Shift? Y / N

6) mRNA - 5' - A **U** G G C U A U G A A G C A U A U C C G A U U A G U C U G A G G U A G A - 3'

Protein sequence - \_\_\_\_\_

Type of mutation: mis-sense / nonsense / silent    insertion / deletion / substitution    Frame Shift? Y / N