

Puzzle 1: Infer the genetic code

Oh no! You spilled coffee on your lab notebook. Figure out the missing result.

Lab Experiment #1

RNA Input: 5'-UUUUUUUUU-3'

Protein Output: FFF (chain of phenylalanine)

Lab Experiment #2

RNA Input: 5'-AAAAAA-3'

Protein Output: KK (chain of lysine)

Lab Experiment #3

RNA Input: 5'-GGGGGGGGGG-3'

Protein Output: GGGG (chain of Glycine)

Lab Experiment #4

RNA Input: 5'-CCCCCCCCCCCC-3'

Protein Output: P P P P P (chain of Proline)

Lab Experiment #5

RNA Input: 5'-U A U A U A U A U A -3'

Protein Output: Y I Y I

Lab Experiment #6

RNA Input: 5'-G C G C G C G C G C -3'

Protein Output: A R A R

Lab Experiment #7

RNA Input: 5'-U G U G U G U G U G -3'

Protein Output: C V C V

Lab Experiment #8

RNA Input: 5'-A C A C A C A C A C -3'

Protein Output: T H T H

Lab Experiment #9

RNA Input: 5'- U G U C G C U A U C C C A C A U A U G U -3'

Protein Output: ???????