

Warm-up

DNA 3' _____
 TACGGATTACCGTGC

Mutation #1: delete the 1st C. Transcribe and translate to find determine the effect of this mutation. Type of mutation?

mRNA (~~T~~AG)~~G~~A~~T~~TAC~~K~~GT(GC) Frameshift
tRNA (AUC) (CUA) (AUG) (GCA) CG
 UAG GAU UAC CGU GC
A.A. Isoleuc. Leucine Methionine Alanine X

Mutation #2: Switch the first C to a T. Transcribe and translate to determine the effect of this mutation. Type of mutation?

mRNA (TAT)GGA(TTA)CLG(TGC)
tRNA (AVA)(CCU)(AAU)(GGC)(ACG)
 UAV GGA UUA CCG UAC Point
A.A. Isoleuc. Proline Asparagine Glycine Threonine

AUG
Methionine