

The diagram illustrates the three types of mutations: silent, missense, and nonsense. It shows a DNA sequence being transcribed into mRNA and then translated into a protein. Silent mutations (blue) change a codon but not the amino acid. Missense mutations (green) change a codon and the amino acid. Nonsense mutations (black) change a codon to a stop codon, leading to a truncated protein. The 'Coding' region is indicated on the right.

