

The diagram is divided into two horizontal panels. The top panel is labeled 'Coding' on the right. It shows a sequence of 12 boxes representing a protein. The first box is green with a blue vertical bar on its right side. The next two boxes are blue. The next three boxes are black with a blue vertical bar on their left side. The next three boxes are blue. The final box is green with a blue vertical bar on its left side. Arrows indicate the sequence from left to right. The bottom panel is labeled 'Non-coding' on the right. It shows a sequence of 12 boxes. The first box is green with a blue vertical bar on its right side. The next two boxes are blue. The next three boxes are black with a blue vertical bar on their left side. The next three boxes are blue. The final box is green with a blue vertical bar on its left side. Arrows indicate the sequence from left to right. The diagram illustrates that a mutation in a coding region (top) can change the amino acid sequence, while a mutation in a non-coding region (bottom) can change the regulatory sequence.

