

The diagram illustrates the structure of a protein-coding gene and its non-coding regions. The top section, labeled "Coding", shows a sequence of exons (green rectangles) and introns (black lines with arrows) that are transcribed into a single mRNA molecule (green line) and translated into a protein (green line). The bottom section, labeled "Non-coding", shows a sequence of exons and introns that are transcribed into a single mRNA molecule (green line) but are not translated into a protein. The diagram uses a grid background to show the relative positions of the exons and introns.

