

The diagram illustrates the structure of a protein-coding gene and its corresponding protein. The top part shows the gene structure with exons (blue) and introns (black), and the bottom part shows the protein structure with domains (blue) and non-coding regions (orange).

Gene Structure (Top): The gene is represented by a sequence of exons (blue) and introns (black). The exons are connected by arrows indicating the direction of transcription. The introns are shown as black segments between the exons.

Protein Structure (Bottom): The protein is represented by a sequence of domains (blue) and non-coding regions (orange). The domains are connected by arrows indicating the direction of translation. The non-coding regions are shown as orange segments between the domains.

Legend:

- Blue: Coding (Exons/Domains)
- Black: Non-coding (Introns)
- Orange: Non-coding (Non-coding regions)

