Specific Peptides Perspective of Proteins

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1. Introduction.

Genes were perceived well before they have been determined to exist on

chromosomes. In hindsight, it seems quite a surprise to find that they are just

stretches of nucleotides within much larger sequences of DNA, often also

interspersed by non-coding sections (introns). The identity of genes comes to life

after being transcribed into RNA molecules, and translated into proteins, the

important components of the machinery of living cells.

Proteins are molecular chains of amino acids. They are being studied by

investigating the linear composition of amino-acid sequences, or their folding

structures, or their functional properties, as revealed by their interactions with other

molecules. In this paper, we will accentuate a different perspective of their

structures, resulting from amino acid motifs, which are observed to be common to

many proteins having the same function, or belonging to homolog genes of

different species.