

Nck, a melanoma cDNA encoding a cytoplasmic protein consisting of the src homology units SH2 and SH3

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A cDNA clone encoding a novel cytoplasmic protein, nck, has been isolated from a human melanoma library using monoclonal antibodies produced against the melanoma associated antigen MUC18 (1). The nck cDNA codes for a protein of 377 amino acids which lacks a signal peptide or transmembrane region. It identifies a mRNA of 2.1kb which is expressed in a wide range of human cell lines. Nck shows no homology with MUC18 and consists of one SH2 (or B+C box) and 3 SH3 (or A box) domains. These domains have been found in nonreceptor typrosine kinases, phospholipase c-γ, the CT10 viral oncogene crk and a variety of proteins in unicellular eukaryotes and are thought to regulate enzymatic activity and/or submembrane localization (2, 3).

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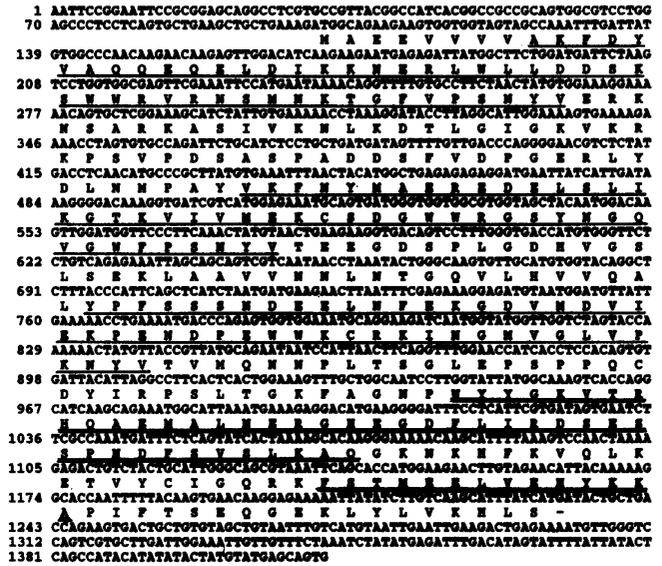

Figure 1. The nucleotide and deduced amino acid sequence of human nck cDNA (clone drop 6). The SH2 domain (B, C boxes double underline) and SH3 domains (single underline) are indicated.

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