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F-Box Domain

National Cancer Institute

Source

National Cancer Institute. *F-Box Domain*. NCI Thesaurus. Code C14103.

The F-box consists of three helices. The H1 helix packs orthogonally with the H2-H3 antiparallel pair. The F-box domain is a 42-48 amino acid conserved domain found at the N-terminus of F-box proteins. F-box proteins act as adaptor components of the modular E3 ubiquitin ligase SCF complex that functions in phosphorylation mediated ubiquitination. The F-box domain mediates interaction with Skp1, which links F-box proteins to a core ubiquitin-ligase complex composed of Rbx1, cdc53/Cul1 and the E2 conjugating enzyme cdc34. The C-terminal region of F-box proteins are also composed of various modular domain that interact with target substrates, often in a phosphorylation dependant manner.