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Polo-Box Domain

National Cancer Institute

Source

National Cancer Institute. *Polo-Box Domain*. NCI Thesaurus. Code C25986.

Members of the polo subfamily of protein kinases appear to play pivotal roles in cell division and proliferation. These include mammalian Plk, Snk, and Fnk/Prk, *Xenopus laevis* Plx1, *Drosophila melanogaster* polo, *Schizosaccharomyces pombe* Plo1, and *Saccharomyces cerevisiae* Cdc5. The polo family members are characterized by the presence of a distinct region of homology in the C-terminal non-catalytic domain, termed the polo-box, which is essential for subcellular localization and mitotic functions of the polo kinases. Regulation of polo kinases may be crucial in the control of cell division.