Open Peer Review on Qeios

Synthetic Alkaloid PM00104

National Cancer Institute

Source

National Cancer Institute. Synthetic Alkaloid PM00104. NCI Thesaurus. Code C62763.

A synthetic alkaloid compound, related to natural alkaloid compounds, found in molluscs (jorumycin) and sponges (renieramycins), with potential antineoplastic activity. PM00104 reversibly binds to DNA, thereby inducing cytotoxicity due to its interference with DNA replication, transcription, and translation processes. DNA binding by this agent does not trigger DNA damage checkpoint responses, hence PM00104 demonstrates a manageable and reversible cytotoxicity as part of its antitumor activity.