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Prexasertib

National Cancer Institute

Source

National Cancer Institute. *Prexasertib*. NCI Thesaurus. Code C91392.

An inhibitor of checkpoint kinase 1 (chk1) with potential antineoplastic activity. Upon administration, prexasertib selectively binds to chk1, thereby preventing activity of chk1 and abrogating the repair of damaged DNA. This may lead to an accumulation of damaged DNA and may promote genomic instability and apoptosis. Prexasertib may potentiate the cytotoxicity of DNA-damaging agents and reverse tumor cell resistance to chemotherapeutic agents. Chk1, a serine/threonine kinase, mediates cell cycle checkpoint control and is essential for DNA repair and plays a key role in resistance to chemotherapeutic agents.