Open Peer Review on Qeios

Voruciclib

National Cancer Institute

Source

National Cancer Institute. <u>Voruciclib</u>. NCI Thesaurus. Code C141430.

A cyclin-dependent kinase (CDK) inhibitor with potential antineoplastic activity. Upon administration, voruciclib selectively inhibits cyclin-dependent kinase 4 (CDK4) and 6 (CDK6). This inhibits retinoblastoma (Rb) protein phosphorylation early in the G1 phase, which prevents CDK-mediated G1-S phase transition and leads to cell cycle arrest. This suppresses DNA replication and decreases tumor cell proliferation. CDK4 and 6 are serine/threonine kinases that are upregulated in many tumor cell types and play a key role in the regulation of cell cycle progression.