

[Open Peer Review on Qeios](#)

PI3K/mTOR Kinase Inhibitor DS-7423

National Cancer Institute

Source

National Cancer Institute. *PI3K/mTOR Kinase Inhibitor DS-7423*. NCI Thesaurus. Code C97254.

An orally bioavailable inhibitor of phosphatidylinositol 3 kinase (PI3K) and mammalian target of rapamycin (mTOR) kinase in the PI3K/mTOR signaling pathway, with potential antineoplastic activity. PI3K/mTOR kinase inhibitor DS-7423 inhibits both PI3K kinase and mTOR kinase, which may result in tumor cell apoptosis and growth inhibition in susceptible tumor cells. Activation of the PI3K/mTOR pathway promotes cell growth, survival, and resistance to chemotherapy and radiotherapy; mTOR, a serine/threonine kinase downstream of PI3K, may also be activated independent of PI3K. Consequently, this agent may potentially be more potent than an agent that inhibits either PI3K kinase or mTOR kinase.