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PI3K/mTORC1/mTORC2 Inhibitor DCBCI0901

National Cancer Institute

Source

National Cancer Institute. *PI3K/mTORC1/mTORC2 Inhibitor DCBCI0901*. NCI Thesaurus. Code C116351.

An inhibitor of phosphatidylinositol 3-kinase (PI3K), raptor-mTOR (mTOR complex 1 or mTORC1) and rictor-mTOR (mTOR complex 2 or mTORC2) with potential antineoplastic activity. Upon intravenous infusion, PI3K/mTORC1/mTORC2 inhibitor DCBCI0901 binds to and inhibits PI3K as well as both mTORC1 and mTORC2, which may result in both apoptosis and a decrease in cell proliferation in tumor cells overexpressing PI3K, mTORC1, and mTORC2. Activation of the PI3K/mTOR signaling 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.