

[Open Peer Review on Qeios](#)

PI3K Alpha/mTOR Inhibitor PWT33597 Mesylate

National Cancer Institute

Source

National Cancer Institute. *PI3K Alpha/mTOR Inhibitor PWT33597 Mesylate*. NCI Thesaurus. Code C97915.

The mesylate salt form of PWT 33597, an orally bioavailable dual inhibitor of phosphatidylinositol 3-kinase (PI3K) alpha and mammalian target of rapamycin (mTOR) kinase with potential antineoplastic activity. PI3K alpha/mTOR dual inhibitor PWT 33597 selectively inhibits both PI3K alpha kinase and mTOR kinase, which may result in tumor cell apoptosis and growth inhibition in PI3K/mTOR-overexpressing 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.