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AKT 1/2 Inhibitor BAY1125976

National Cancer Institute

Source

National Cancer Institute. *AKT 1/2 Inhibitor BAY1125976*. NCI Thesaurus. Code C111575.

An orally bioavailable inhibitor of the serine/threonine protein kinase AKT (protein kinase B) isoforms 1 and 2 (AKT 1/2) with potential antineoplastic activity. AKT 1/2 inhibitor BAY1125976 selectively binds to and inhibits the phosphorylation and activity of AKT 1/2 in a non-ATP competitive manner, which may result in the inhibition of the phosphatidylinositol 3 (PI3K)/AKT/mammalian target of rapamycin (mTOR) signaling pathway. This may lead to both the reduction of cell proliferation and the induction of cell apoptosis in AKT-overexpressing tumor cells. The AKT signaling pathway is often deregulated in cancer and is associated with tumor cell proliferation, survival and migration.