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PI3K-beta Inhibitor GSK2636771

National Cancer Institute

Source

National Cancer Institute. *PI3K-beta Inhibitor GSK2636771*. NCI Thesaurus. Code C106261.

An orally bioavailable, substituted benzimidazole inhibitor of the class I phosphoinositide 3-kinase (PI3K) beta isoform with potential antineoplastic activity. PI3K beta inhibitor GSK2636771 selectively inhibits PI3K beta kinase activity in the PI3K/Akt/mTOR pathway, which may result in tumor cell apoptosis and growth inhibition in PI3K beta-expressing and/or PTEN-driven tumor cells. Dysregulation of the PI3K/Akt/mTOR pathway is frequently found in solid tumors and results in the promotion of tumor cell growth, survival, and resistance to both chemotherapy and radiotherapy. PI3K beta is the p110-beta catalytic subunit of the class I PI3K. PTEN, a tumor suppressor protein and negative regulator of PI3K activity, is often mutated in a variety of cancer cells.