Product Datasheet

PIK-90

Catalog No. **BP-02509** · CAS **677338-12-4** · Form **free base** · Physical state **solid** · Color **Off-white to yellow** · Version **1.0** · Revision **2026-09-10**

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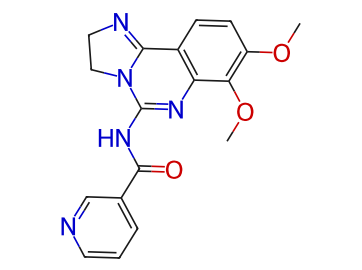
Target	Research area
PI3K; DNA-PK	**Cancer**

Molecular formula	$C_{18}H_{17}N_5O_3$
Molecular weight	**351.3593**

STRUCTURE



DESCRIPTION

PIK-90 is a DNA-PK and PI3K inhibitor, which inhibits p110α, p110γ and DNA-PK with IC50s of 11, 18 and 13 nM, respectively.

BIOLOGICAL ACTIVITY

PIK-90 is a novel and potent PI3K inhibitor with IC50 values of 11 nM, 350 nM, 18 nM and 58 nM for p110α, p110β, p110γ and p110δ respectively. Phosphoinositide 3-kinases (PI3Ks) are among the most frequently activated signaling pathways in cancer. Inhibition with p110alpha inhibitor PIK-90 resulted in a significant reduction of chemotaxis and actin polymerization to CXCL12 and reduced migration beneath MSC (pseudoemperipolesis). In suspension and MSC cocultures, PIK-90 was potent inducers of CLL cell apoptosis.

SOLUBILITY

Soluble in DMSO; HCl

REFERENCES

[1].Knight ZA, et al. A pharmacological map of the PI3-K family defines a role for p110alpha in insulin signaling. Cell. 2006 May 19;125(4):733-47.

[2].Niedermeier M, et al. Isoform-selective phosphoinositide 3'-kinase inhibitors inhibit CXCR4 signaling and overcome stromal cell-mediated drug resistance in chronic lymphocytic leukemia: a novel therapeutic approach. Blood. 2009 May 28;113(22):5549-57.

[3].Cheng CK, et al. Dual blockade of lipid and cyclin-dependent kinases induces synthetic lethality in malignant glioma. Proc Natl Acad Sci U S A. 2012 Jul 31;109(31):12722-7.

Lot CoA and SDS are separate documents.