

FPA-124

Chemical Properties

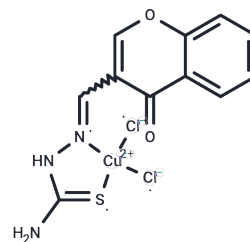
CAS No. : 902779-59-3

Formula: C₁₁H₉Cl₂CuN₃O₂S

Molecular Weight: 381.73

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	FPA-124 is a cell-permeable copper complex that acts as a selective Akt (protein kinase B) inhibitor interacting with the homology (PH) and kinase structural domains of Akt to induce apoptosis. It has the advantage of being highly potent and exhibits dose-dependent growth inhibition in a variety of cancer cell lines.
Targets(IC50)	Apoptosis,Akt
In vitro	FPA-124 can inhibit the growth of BT20, PC-3, COLO 357 and BxPC-3 cancer cells in a concentration-dependent manner with IC50 values of 7, 10, 34 and 55 μM, respectively. [1]
In vivo	FPA-124 treatment inhibits PKB (Akt protein) activity and leads to inactivation of NF-κB in a mature orthotopic pancreatic tumor model mouse model bearing COLO 357 cells. [1]

Solubility Information

Solubility	DMSO: 2 mg/mL (5.24 mM),Sonication is recommended. H ₂ O: < 0.1 mg/mL (insoluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6197 mL	13.0983 mL	26.1965 mL
5 mM	0.5239 mL	2.6197 mL	5.2393 mL
10 mM	0.262 mL	1.3098 mL	2.6197 mL
50 mM	0.0524 mL	0.262 mL	0.5239 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Barve V, et al. Synthesis, molecular characterization, and biological activity of novel synthetic derivatives of chromen-4-one in human cancer cells. *J Med Chem.* 2006 Jun 29;49(13):3800-8.

Biscetti F, et al. Pioglitazone enhances collateral blood flow in ischemic hindlimb of diabetic mice through an Akt-dependent VEGF-mediated mechanism, regardless of PPARgamma stimulation. *Cardiovasc Diabetol.* 2009 Sep 8; 8:49.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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