

FPA-124 (Akt inhibitor)

Catalog number: B-0101

Molecular Formula: $C_{11}H_9Cl_2CuN_3O_2S$

MW: 381.7

CAS: 902779-59-3

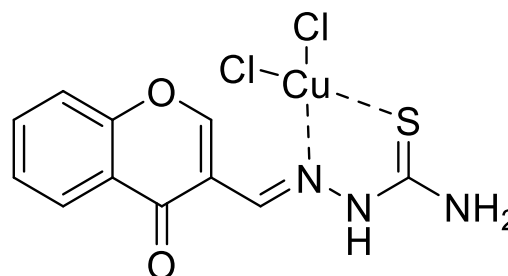
Alternate Names: 3-Forylchromone thiosemicarbazone, Cu(II)Cl₂ complex

Solubility: DMSO: 5 mg/mL

Storage and Handling: Store dry between 2-8 °C. Stock solutions should be stored frozen (-20 °C or below).

Background: FPA-124 is a cell-permeable inhibitor of Akt (IC₅₀ = 100 nM), binding to the PH and kinase domains. It inhibits cell proliferation in Colo357, BxPC3, BT20, and PC3 cancer cell lines with IC₅₀ values ranging from 7-55 nM. FPA-124 inhibited tumor growth in mice with negligible toxicity.

References: 1) V. Barve, *et al.* "Synthesis, Molecular Characterization, and Biological Activity of Novel Synthetic Derivatives of Chromen-4-one in Human Cancer Cells" *J. Med. Chem.*, 2006, 49, 3800-3808. 2) Biscetti, F. *et al.* "Pioglitazone enhances collateral blood flow in ischemic hindlimb of diabetic mice through an Akt-dependent VEGF-mediated mechanism, regardless of PPAR γ stimulation" *Cardiovascular Diabetology* 2009, 8:49, doi:10.1186/1475-2840-8-49 3) Strittmatter, F. *et al.* "Activation of protein kinase B/Akt by alpha1-adrenoceptors in the human prostate." *Life Sci.* 2012, 90(11-12), 446-53.



Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

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