

EGFR-IN-109

Chemical Properties

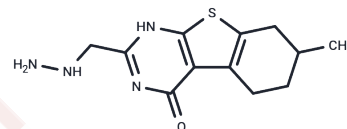
CAS No. : 3019971-97-9

Formula: C₁₂H₁₆N₄O₅

Molecular Weight: 264.35

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	EGFR-IN-109 (compound 4), an EGFR inhibitor, displays IC ₅₀ values of 25.8 nM for EGFR WT and 182.3 nM for EGFR T790M. This compound halts the growth of cancer cells at the G ₂ /M phase and triggers both early and late apoptosis. It is applicable in cancer research [1].
Targets(IC ₅₀)	Apoptosis,EGFR,Bcl-2 Family,Caspase
In vitro	EGFR-IN-109 (compound 4) effectively inhibits the proliferation of high EGFR-expressing MCF-7 and A549 cells with IC ₅₀ values of 13.06 μM and 20.13 μM, respectively, over 2 days [1]. At a concentration of 13.06 μM for 24 hours, this compound induces apoptosis in A549 cells by arresting cell growth at the G ₂ /M phase [1]. Additionally, a 72-hour exposure at 13.06 μM enhances the expression of caspase-3, caspase-9, and BAX proteins, while downregulating Bcl-2 expression in A549 cells [1]. In a cell proliferation assay involving MCF-7, A549, and normal W138 cell lines, EGFR-IN-109 at concentrations ranging from 0-20 μM demonstrated a pronounced inhibitory effect on MCF-7 and A549, and a weaker effect on WI-38 cells, with selectivity indices of 2.8 and 1.8 for the two cancer cell lines, respectively.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.7829 mL	18.9143 mL	37.8286 mL
5 mM	0.7566 mL	3.7829 mL	7.5657 mL
10 mM	0.3783 mL	1.8914 mL	3.7829 mL
50 mM	0.0757 mL	0.3783 mL	0.7566 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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