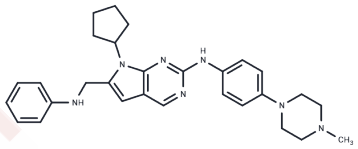
Data Sheet (Cat.No.T63185)

TargetMol

EGFR-IN-47

Chemical Properties



CAS No. : 3034649-73-2

Formula: C29H35N7

Molecular Weight: 481.64

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-47 (compound 14aj) is a potent, fourth-generation, and orally active EGFR inhibitor. It specifically targets the EGFR L858R/T790M/C797S triple mutation with an IC50 of 0.01 uM. In NSCLC research, EGFR-IN-47 effectively overcomes C797S-mediated resistance to Osimertinib by inhibiting the phosphorylation of EGFR and its downstream mediators, subsequently inducing cell cycle arrest and apoptosis.
Targets(IC50)	EGFR
In vitro	EGFR-IN-47 potently inhibits PC-9 cell growth (IC50 = 0.013 uM) and induces G0/G1 arrest [1].
In vivo	Oral EGFR-IN-47 (10-40 mg/kg) shows significant efficacy in xenografts; rat PK reveals 66.05% bioavailability [1].

Solubility Information

Solubility	DMSO: 16.00 mg/mL (33.22 mM),Sonication is recommmended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0762 mL	10.3812 mL	20.7624 mL
5 mM	0.4152 mL	2.0762 mL	4.1525 mL
10 mM	0.2076 mL	1.0381 mL	2.0762 mL
50 mM	0.0415 mL	0.2076 mL	0.4152 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

Early JV, et al. Oxadiazoles Have Butyrate-Specific Conditional Activity against Mycobacterium tuberculosis. Antimicrob Agents Chemother. 2016 May 23;60(6):3608-16.