

XMD-17-51

Chemical Properties

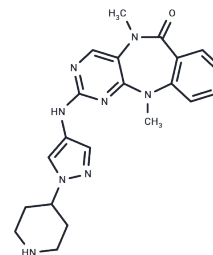
CAS No. : 1628614-50-5

Formula: C₂₁H₂₄N₈O

Molecular Weight: 404.47

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	XMD-17-51 has DCLK1 kinase inhibitory activity, inhibits DCLK1 and cell proliferation, and can be used in lung cancer research.
Targets(IC50)	Others,CDK,AMPK,Serine Protease
In vitro	Overexpression of DCLK1 was found to reduce the antiproliferative effect of XMD-17-51 in the A549 cell line, increasing its IC50 from 27.575 μ M to 53.197 μ M and vice versa. In a cell-free assay, XMD-17-51 showed an inhibitory effect on DCLK1 kinase activity with an IC50 of 14.64 nM. In non-small cell lung cancer (NSCLC) cell lines, XMD-17-51 also reduced DCLK1 protein expression, which resulted in inhibition of cell proliferation, epithelial-mesenchymal transition (EMT), and stem cell characterization. [1]

Solubility Information

Solubility	Ethanol: 40 mg/mL (98.89 mM),Sonication is recommended. DMSO: 40 mg/mL (98.89 mM),Sonication is recommended. H2O: 1 mg/mL (2.47 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4724 mL	12.3619 mL	24.7237 mL
5 mM	0.4945 mL	2.4724 mL	4.9447 mL
10 mM	0.2472 mL	1.2362 mL	2.4724 mL
50 mM	0.0494 mL	0.2472 mL	0.4945 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

Yang WQ, et al. XMD-17-51 Inhibits DCLK1 Kinase and Prevents Lung Cancer Progression. Front Pharmacol. 2021 Mar 8;12:603453.

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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