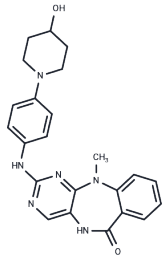
Data Sheet (Cat.No.T3710)

TargetMol

XMD16-5

Chemical Properties



CAS No. : 1345098-78-3

Formula: C23H24N6O2

Molecular Weight: 416.48

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	XMD16-5 is a TNK2 inhibitor. TNK2 genomic amplification has been associated with late-stage or metastatic lung and prostate Ys. Overexpression of TNK2 promoted metastasis in a mouse model of breast Y. TNK2 signaling is disrupted in breast, prostate and gastrointestinal tumors.
Targets(IC50)	PPAR,Tyrosinase
In vitro	XMD16-5 is found to be potent in the inhibition of TNK2 phosphorylation. XMD8-87 and XMD16-5 potently inhibit phosphorylation of TNK2 truncation mutations found in solid tumor types.
Kinase Assay	Kinase targets are tested with biochemical enzymatic kinase assays using the SelectScreen Kinase Profiling Service to determine IC50 values. The compounds (XMD16-5) are assayed at 10 concentrations (3-fold serial dilutions starting from 1 μM) at an ATP concentration equal to the ATP Km[1].
Cell Research	293T cells expressing TNK2 are plated in 6-well format at a density of 250,000 cells per well 48 hours prior to treatment. Cells are then treated with a 100 μL of XMD8-87 or XMD16-5 at 5 μmol/L and with 9 1:1 serial dilutions down to ≈10 nmol/L. Two additional samples are treated with DMSO only. Cells are then incubated for 6 hours at 37°C. Protein extraction is accomplished by adding 300 μL of lysis buffer to cells after removing media. Plates are gently shaken for 5 minutes at room temperature. Lysates are collected and cleared of incompletely solubilized material by spinning for 10 minutes at maximum speed in a microcentrifuge. Samples are prepared for SDS-PAGE using the EPage loading buffer.(Only for Reference)

Solubility Information

Solubility	DMSO: 45 mg/mL (108.05 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 5 mg/mL (12.01 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.8 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may*

In vivo Formulation	*vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4011 mL	12.0054 mL	24.0108 mL
5 mM	0.4802 mL	2.4011 mL	4.8022 mL
10 mM	0.2401 mL	1.2005 mL	2.4011 mL
50 mM	0.048 mL	0.2401 mL	0.4802 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

Maxson JE, et al. Cancer Res. 2016, 76(1):127-38.