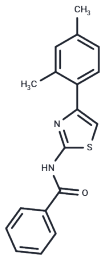
Data Sheet (Cat.No.T2502)

TargetMol

INH1

Chemical Properties



CAS No. : 313553-47-8

Formula: C18H16N2OS

Molecular Weight: 308.4

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	INH1 (IBT13131) is a cell-permeable Hec1 inhibitor that specifically disrupts the Hec1/Nek2 interaction.
Targets(IC50)	Apoptosis,MAPK,Microtubule Associated
In vitro	Intraperitoneal injection of 100 mg/kg INH1 inhibits the growth of mammary tumors in mice with MDA-MB-468 human breast cancer xenografts.
In vivo	INH1 effectively inhibits the proliferation of human breast cancer cells with a GI50 of 10-21 μM. Additionally, INH1 induces cell-killing activity by disrupting the spindle checkpoint-regulated Hec1/Nek2 pathway.
Kinase Assay	Binding assays: Surface plasma resonance (SPR) assays are performed at 22.5°C in HBSD buffer [10 mmol/L HEPES, 150 mmol/L NaCl, 0.1% DMSO (pH 7.5)] on Biacore 3000. 6×His-Hec1 and GST-Nek2 are purified. NTA sensor chip or glutathione-modified CM5 chip are used to capture His-Hec1 and GST-Nek2, respectively. The capture level is about 140 to 180 resonance units (RU) at the flow rate of 5 μL/min. For the binding assay, chips are sequentially treated with compounds (1 or 20 μmol/L) and then proteins (50 μg/mL). Retained RUs are recorded and processed (triplicate experiments).
Cell Research	Standard 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide assays with a 3-d drug treatment procedure are performed to measure the dose-dependent cytotoxicity of INH1 in cultured cells. Triplicate sets are measured and compiled for final data presentation.(Only for Reference)

Solubility Information

Solubility	DMSO: 30.8 mg/mL (99.87 mM),Sonication is recommended. Ethanol: 3.1 mg/mL (10.05 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2425 mL	16.2127 mL	32.4254 mL
5 mM	0.6485 mL	3.2425 mL	6.4851 mL
10 mM	0.3243 mL	1.6213 mL	3.2425 mL
50 mM	0.0649 mL	0.3243 mL	0.6485 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

Wu G, et al. Cancer Res. 2008, 68(20), 8393-8399.