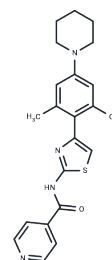


INH154

Chemical Properties

CAS No. : 1587705-63-2
 Formula: C₂₂H₂₄N₄O₅
 Molecular Weight: 392.52
 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	INH154 is a highly potent inhibitor of Nek2 and Hec1 binding (INH), with IC ₅₀ values of 120 nM in MB468 cells and 200 nM in Hela cells.
Targets(IC ₅₀)	Others,MAPK
In vitro	INH154 effectively inhibits the proliferation of leukemia, osteosarcoma, and glioblastoma cells and demonstrates high potency in treating breast tumors characterized by elevated levels of Hec1 and Nek2. It stands out as the most potent suppressor of tumor cell growth among its class, with IC ₅₀ values of 0.20 μM in HeLa cancer cells and 0.12 μM in MDA-MB-468 cancer cells, showcasing its exceptional effectiveness.
In vivo	Tumor growth in mice treated with INH154 was significantly slower than in control animals in a dose-dependent manner. Consistent with tumor growth data, residual tumors treated with INH154 had significantly lower tumor proliferation index compared to vehicle alone. The expression levels of Nek2 and Hec1 S165 phosphorylation were also significantly reduced in INH154-treated tumors compared with vehicle-treated tumors. On the other hand, the body weight of the mice was measured during the 6.5-week treatment period, and there was little difference between the treated and control groups[1].

Solubility Information

Solubility	DMSO: 65 mg/mL (165.6 mM),Sonication is recommended. H ₂ O: < 0.1 mg/mL (insoluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (12.74 mM),Sonication is recommended. <i>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 vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5476 mL	12.7382 mL	25.4764 mL
5 mM	0.5095 mL	2.5476 mL	5.0953 mL
10 mM	0.2548 mL	1.2738 mL	2.5476 mL
50 mM	0.051 mL	0.2548 mL	0.5095 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

Hu CM, et al. Novel small molecules disrupting Hec1/Nek2 interaction ablate tumor progression by triggering Nek2 degradation through a death-trap mechanism. *Oncogene*. 2015 Mar 5;34(10):1220-30.

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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