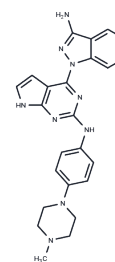


Mps1-IN-5

Chemical Properties

CAS No. :	2890819-31-3
Formula:	C ₂₄ H ₂₅ N ₉
Molecular Weight:	439.52
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	Mps1-IN-5 is a potent, orally active Mps1 inhibitor exhibiting an IC ₅₀ of 29 nM, known for triggering apoptosis and G2/M phase cell cycle arrest. This compound demonstrates antiproliferative and anti-tumor effects by inhibiting Mps1 phosphorylation and inducing DNA damage [1].
Targets(IC ₅₀)	Apoptosis,Others,Kinesin
In vitro	Mps1-IN-5 (compound 12) inhibited the proliferation of MCF-7 and 4T1 cells in a time-dependent manner at 0-10 μM over 24, 48, and 72 hours [1]. It induced apoptosis and caused G2/M phase cell cycle arrest in a dose-dependent manner at 0, 0.5, 1.0, and 5.0 μM for 24 and 48 hours [1]. Additionally, at 0, 0.03, 0.1, 1, or 3 μM for 2 hours, the compound inhibited Mps1 phosphorylation and induced DNA damage [1].
In vivo	Mps1-IN-5 (30, 60 mg/kg; oral administration; daily for 15 days) effectively suppresses tumor growth in a breast cancer model without significant toxicity [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2752 mL	11.376 mL	22.7521 mL
5 mM	0.455 mL	2.2752 mL	4.5504 mL
10 mM	0.2275 mL	1.1376 mL	2.2752 mL
50 mM	0.0455 mL	0.2275 mL	0.455 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.

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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