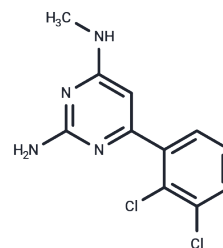


TH287

Chemical Properties

CAS No. : 1609960-30-6
 Formula: C₁₁H₁₀Cl₂N₄
 Molecular Weight: 269.13
 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	TH287 is a potent inhibitor of MTH1 (NUDT1), less potent for MTH2, NUDT5, NUDT12, NUDT14, and NUDT16.
Targets(IC50)	DNA/RNA Synthesis, MTH1
In vitro	TH287 selectively and effectively kill U2OS and other cancer cell lines with less toxic to several primary or immortalized cells, and induces oxidative DNA damage. [1]
In vivo	In C57Bl/6 mice, TH287 (5 mg/kg, i.p.) causes a peak time and maximum concentration of 0.5 h and 0.82 μM. [2]

Solubility Information

Solubility	Ethanol: 10 mg/mL (37.16 mM), Heating is recommended. DMSO: 49 mg/mL (182.07 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 (7.43 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	3.7157 mL	18.5784 mL	37.1568 mL
5 mM	0.7431 mL	3.7157 mL	7.4314 mL
10 mM	0.3716 mL	1.8578 mL	3.7157 mL
50 mM	0.0743 mL	0.3716 mL	0.7431 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

Gad H, et al. Nature. 2014, 508(7495), 215-221.

Saleh A, et al. J Pharm Biomed Anal. 2015, 104, 1-11.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481