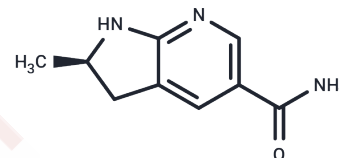


NNMT-IN-4

Chemical Properties

CAS No. :	2947393-64-6
Formula:	C ₉ H ₁₁ N ₃ O
Molecular Weight:	177.2
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	NNMT-IN-4 (compound 38) is a selective, uncompetitive inhibitor of nicotinamide N-methyltransferase (NNMT) with in vitro biochemical and cell-based assay IC ₅₀ values of 42 nM and 38 nM, respectively. It demonstrates favorable pharmacokinetics/pharmacodynamics (PK/PD) and safety profiles, excellent oral bioavailability, and promising pharmaceutical properties. NNMT-IN-4 serves as an in vivo chemical probe for NNMT [1].
Targets(IC ₅₀)	Others
In vitro	NNMT-IN-4 exhibits its bioactivity within the range of 5 nM to 0.5 μM, effectively inhibiting its target with high specificity. This compound demonstrates a robust response in biochemical assays, maintaining efficacy across the indicated concentration spectrum.
In vivo	The pharmacokinetic profile of NNMT-IN-4 in mice, as indicated by reference [1], demonstrates that when administered orally at a dose of 50 mg/kg, the compound has a half-life (T _{1/2}) of 2.89 hours and reaches its maximum concentration (C _{max}) of 22,500 ng/mL in 0.25 hours (T _{max}). The area under the curve to the last measurable concentration (AUC _{last}) is reported as 51,115 ng*h/mL. Intravenously administered at 1 mg/kg, NNMT-IN-4 exhibits a clearance (Cl) rate of 36.1 mL/min/kg, with a bioavailability (F) of 220%.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.6433 mL	28.2167 mL	56.4334 mL
5 mM	1.1287 mL	5.6433 mL	11.2867 mL
10 mM	0.5643 mL	2.8217 mL	5.6433 mL
50 mM	0.1129 mL	0.5643 mL	1.1287 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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