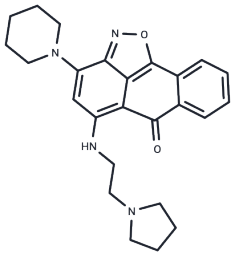
Data Sheet (Cat.No.T10882)

TargetMol

CPUY074020

Chemical Properties



CAS No. : 902279-44-1

Formula: C25H28N4O2

Molecular Weight: 416.52

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	CPUY074020 is a potent and orally bioavailable inhibitor of histone methyltransferase G9a (IC50: 2.18 μM) with anti-proliferative activity.
Targets(IC50)	Histone Methyltransferase
In vitro	CPUY074020 (2.5-10μM ; 48 hours) dose-dependently de-regulates H3K9 trimethylation. CPUY074020 (2-8μM; 24 hours) induces cell death through apoptosis[1].
In vivo	CPUY074020 shows reasonable PK properties, with a T1/2 value of 4.0 hours and an oral bioavailability of 55.5% at an oral dose of 10 mg/kg[1].

Solubility Information

Solubility	DMSO: 4.17 mg/mL (10.01 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: 1 mg/mL (2.4 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4008 mL	12.0042 mL	24.0085 mL
5 mM	0.4802 mL	2.4008 mL	4.8017 mL
10 mM	0.2401 mL	1.2004 mL	2.4008 mL
50 mM	0.048 mL	0.2401 mL	0.4802 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

Chen WL, et al. Discovery, design and synthesis of 6H-anthra[1,9-cd]isoxazol-6-one scaffold as G9a inhibitor through a combination of shape-based virtual screening and structure-based molecular. Bioorg Med Chem. 2016 Nov 15;24(22):6102-6108.