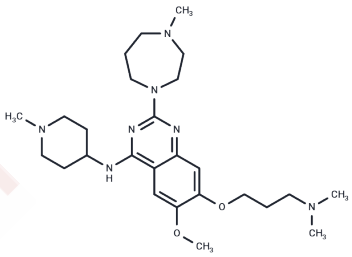
Data Sheet (Cat.No.T17203)

TargetMol

UNC0224

Chemical Properties



CAS No. : 1197196-48-7

Formula: C26H43N7O2

Molecular Weight: 485.67

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	UNC0224 is a selective inhibitor of G9a with a Ki of 2.6 nM and IC50 of 15 nM. UNC0224 also potently inhibits GLP with assay-dependent IC50 values of 20-58 nM.
Targets(IC50)	Histone Methyltransferase
In vitro	In G9a ECSD and CLOT assays, the IC50 values are 43 nM and 57 nM for UNC0224, respectively. In GLP ECSD and CLOT assays, the IC50 values are 50 nM and 58 nM for UNC0224, respectively. UNC0224 is inactive against SET7/9, SET8/PreSET7, PRMT3, and JMJD2E. In ITC experiments, the Kd of UNC0224 to the G9a protein is 23 nM[1].

Solubility Information

Solubility	DMSO: 35.71 mg/mL (73.53 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 (2.06 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	2.059 mL	10.2951 mL	20.5901 mL
5 mM	0.4118 mL	2.059 mL	4.118 mL
10 mM	0.2059 mL	1.0295 mL	2.059 mL
50 mM	0.0412 mL	0.2059 mL	0.4118 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

Liu F, et al. Protein lysine methyltransferase G9a inhibitors: design, synthesis, and structure activity relationships of 2,4-diamino-7-aminoalkoxy-quinazolines. J Med Chem. 2010 Aug 12;53(15):5844-57.
Liu F, et al. Discovery of a 2,4-diamino-7-aminoalkoxyquinazoline as a potent and selective inhibitor of histone lysine methyltransferase G9a. J Med Chem. 2009 Dec 24;52(24):7950-3.