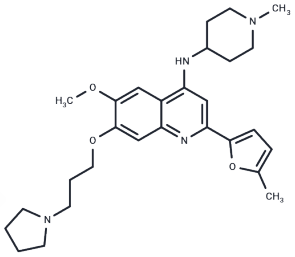
Data Sheet (Cat.No.T7194)

TargetMol

CM-272

Chemical Properties



CAS No. : 1846570-31-7

Formula: C28H38N4O3

Molecular Weight: 478.63

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	CM-272 is a dual G9a/DNA methyltransferases (DNMTs) inhibitor.
Targets(IC50)	Apoptosis,Histone Methyltransferase,DNA Methyltransferase
In vitro	CM-272, inhibits cell proliferation and promotes apoptosis, inducing interferon-stimulated genes and immunogenic cell death. CM-272 significantly prolongs survival of AML, ALL and DLBCL xenogeneic models.
In vivo	CM-272 (2.5 mg/kg; intravenous injection; daily; for 28 days; female Rag2?/?γc?/? mice) treatment significantly prolongs survival of CEMO-1 cells xenogeneic models.Induced a statistically significant increase in overall survival (OS) in mice.
Cell Research	Cell Line:CEMO-1, MV4-11 and OCI-Ly10 cell lines. Concentration:125 nM, 250 nM, 500 nM (CEMO-1 cells); 135 nM, 270 nM, 540 nM (MV4-11 cells); 100 nM, 400 nM, 1000 nM (OCI-Ly10 cells). Incubation Time:12 hours, 24 hours, 48 hours and 72?hours
Animal Research	CM-272 (2.5 mg/kg; intravenous injection; daily; for 28 days; female Rag2?/?γc?/? mice) treatment significantly prolongs survival of CEMO-1 cells xenogeneic models. Animal Model:Female BALB/Ca-Rag2?/?γc?/? mice (6-8-week-old) with CEMO-1 cells. Dosage: 2.5 mg/kg. Administration:Intravenous injection; daily; for 28 days

Solubility Information

Solubility	DMSO: 250 mg/mL (522.32 mM),Sonication is recommended. Ethanol: 96 mg/mL (200.57 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: 10 mg/mL (20.89 mM),Solution. 10% DMSO+90% Saline: < 10 mg/mL (20.89 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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	2.0893 mL	10.4465 mL	20.893 mL
5 mM	0.4179 mL	2.0893 mL	4.1786 mL
10 mM	0.2089 mL	1.0446 mL	2.0893 mL
50 mM	0.0418 mL	0.2089 mL	0.4179 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

San José-Enériz, Edurne, Agirre X , Rabal O , et al. Discovery of first-in-class reversible dual small molecule inhibitors against G9a and DNMTs in hematological malignancies[J]. Nature Communications, 2017, 8:15424.