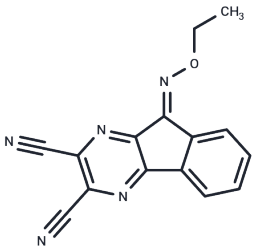
Data Sheet (Cat.No.T11111)

TargetMol

DUB-IN-2

Chemical Properties



CAS No. : 924296-19-5

Formula: C15H9N5O

Molecular Weight: 275.26

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	Dub-in-2, with an IC50 value of 0.28 for USP8, is an effective deubiquitinase inhibitor.
Targets(IC50)	DUB
In vitro	DUBs-IN-2 inhibits the viability of HCT116 colon cell line and PC-3 prostate cancer cell line with IC50 values of 0.5-1.5 μM.DUBs-IN-2 is a potent USP8 inhibitor with an IC50 of 0.28 μM, and has no effect on USP7, with an IC50 of >100 μM.

Solubility Information

Solubility	DMSO: 16.18 mg/mL (58.78 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 1.62 mg/mL (5.89 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1.62 mg/mL (5.89 mM),Suspension. *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	3.6329 mL	18.1646 mL	36.3293 mL
5 mM	0.7266 mL	3.6329 mL	7.2659 mL
10 mM	0.3633 mL	1.8165 mL	3.6329 mL
50 mM	0.0727 mL	0.3633 mL	0.7266 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

Colombo M, et al. Synthesis and biological evaluation of 9-oxo-9H-indeno[1,2-b]pyrazine-2,3-dicarbonitrile analogues as potential inhibitors of deubiquitinating enzymes. ChemMedChem. 2010 Apr 6;5(4):552-8.