DUB-IN-2

Cat. No.: HY-50737A

CAS No.: 924296-19-5

Molecular Formula: $C_{15}H_9N_5O$

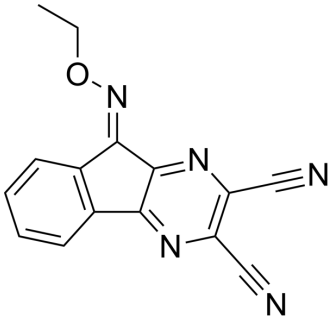
Molecular Weight: 275.26

Target: Deubiquitinase

Pathway: Cell Cycle/DNA Damage

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 10 mg/mL (36.33 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
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

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 50% PEG300 >> 50% saline
   Solubility: 1.5 mg/mL (5.45 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: 1 mg/mL (3.63 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

DUB-IN-2 is a potent deubiquitinase inhibitor with an IC_{50} of 0.28 μM for USP8[1].

IC_{50} & Target

IC50: 0.28 μM (USP8)[1]

In Vitro

DUBs-IN-2 (compound 22 e) is a potent USP8 inhibitor with an IC_{50} of 0.28 μM, and has no effect on USP7, with an IC_{50} of >100 μM. DUBs-IN-2 inhibits the viability of HCT116 colon cell line and PC-3 prostate cancer cell line with IC_{50} values of 0.5-1.5?μM[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Nat Commun. 2022 Mar 31;13(1):1700.
- Cell Death Differ. 2022 Dec 20.
- Cell Death Differ. 2020 Apr;27(4):1341-1354.
- J Adv Res. 1 February 2022.
- Cell Death Dis. 2022 Mar 31;13(3):286.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. 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.

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