

MS1943

## Chemical Properties

CAS No. : 2225938-17-8

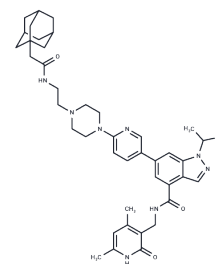
Formula: C42H54N8O3

Molecular Weight: 718.93

Keep away from direct sunlight

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	MS1943 is a orally bioavailable EZH2 selective degrader(IC50 of 120 nM).
Targets(IC50)	Apoptosis,Histone Methyltransferase,PROTACs
In vitro	MS1943 inhibits cell growth (GI50 of 2.2 $\mu$ M). MS1943 induces cell death in MDA-MB-468 cells. MS1943 effectively reduces EZH2 levels in BT549, HCC70 and MDA-MB-231 TNBC cells, as well as KARPAS-422 and SUDHL8 lymphoma cells and PNT2 non-cancerous prostate cells[1].
In vivo	A single i.p. injection of MS1943 at 50 mg/kg body weight achieved a peak plasma concentration (Cmax) of 2.9 $\mu$ M and resulted in plasma concentrations above its cellular IC50 value for ~2h. A single 150 mg/kg body weight p.o. dose achieved Cmax of 1.1 $\mu$ M, but plasma concentrations were below the cellular IC50 value.MS1943 suppresses tumor growth[1].

## Solubility Information

Solubility	DMSO: 245 mg/mL (340.78 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 (13.91 mM),Solution. 10% DMSO+90% Saline: < 10 mg/mL (13.91 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. <i>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.</i>

### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	1.391 mL	6.9548 mL	13.9096 mL
5 mM	0.2782 mL	1.391 mL	2.7819 mL
10 mM	0.1391 mL	0.6955 mL	1.391 mL
50 mM	0.0278 mL	0.1391 mL	0.2782 mL

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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

Ma A, et al. Discovery of a first-in-class EZH2 selective degrader. Nat Chem Biol. 2020 Feb;16(2):214-222.

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