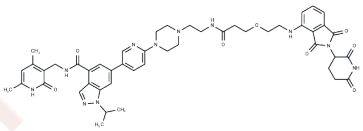
Data Sheet (Cat.No.T69771)

TargetMol

MS-177

Chemical Properties



CAS No. : 2225938-86-1

Formula: C48H55N11O8

Molecular Weight: 914.02

Storage: Keep away from direct sunlight
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	MS-177 is a PROTAC EZH2 degrader that promotes cholangiocarcinoma growth through the EZH2-mediated WNT7B/β-catenin pathway.MS-177 inhibits the growth of leukemia cells, induces apoptosis, and cell cycle arrest.MS-177 induces degradation of the classical EZH2-PRC2 and the non-classical EZH2-cMyc complexes and activates the immune-responsive genes in MM cells.
Targets(IC50)	Apoptosis,Histone Methyltransferase,PROTACs
In vitro	MS-177 inhibits the enzymatic activities of EZH2-PRC2 (IC50=7 nM). In EOL-1 and MV4;11 cells, MS-177 exhibited half-maximal degradation concentration (DC50) values of 0.2 μM and 1.5 μM, and maximum degradation (Dmax) values of 82% and 68%. [1]
In vivo	Two doses of MS-177 (100 mg/kg intraperitoneally twice a day, 6 days per week; and 200 mg/kg intraperitoneally twice a day, 3 days per week) were well tolerated in mice and showed no significant toxicity. The antitumor effects of MS-177 were evaluated using a patient-derived xenograft (PDX) animal model of MLL-r AML, and both of the above MS-177 dosing regimens significantly inhibited AML growth in the PDX model, either established by seeding or subcutaneous inoculation, and prolonged survival, relative to controls. [1]

Solubility Information

Solubility	DMSO: 120 mg/mL(131.29 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.0941 mL	5.4703 mL	10.9407 mL
5 mM	0.2188 mL	1.0941 mL	2.1881 mL
10 mM	0.1094 mL	0.547 mL	1.0941 mL
50 mM	0.0219 mL	0.1094 mL	0.2188 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

Wang J, et al. EZH2 noncanonically binds cMyc and p300 through a cryptic transactivation domain to mediate gene activation and promote oncogenesis. Nat Cell Biol. 2022 Mar;24(3):384-399.