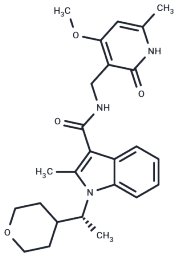
Data Sheet (Cat.No.T6810)

TargetMol

CPI-360

Chemical Properties



CAS No. : 1802175-06-9

Formula: C25H31N3O4

Molecular Weight: 437.53

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	CPI-360 is a small molecule EZH2 inhibitor (IC50: 0.002 μM, EC50: 0.080 μM) that shows antitumor activity in an EZH200-dependent tumor xenograft model.
Targets(IC50)	Apoptosis,Histone Methyltransferase
In vitro	In KARPAS-422 cells, CPI-360 potently reduces global H3K27me3 and H3K27me2 levels with EC50 of 56 nM and 65 nM, respectively. CPI-360 also causes time-dependent transcriptional changes, and affects the viability of Y641N mutant EZH2-containing KARPAS-422 cells. In addition, CPI-360 gradually arrests KARPAS-422 cells in the G1 cell cycle stage followed by the induction of apoptosis. [1]
In vivo	In mice bearing KARPAS-422 xenografts, CPI-360 (200 mg/kg, s.c.) reduces tumor growth by 44%. [1]

Solubility Information

Solubility	DMSO: 22.5 mg/mL (51.43 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), DMF: 9 mg/mL (20.57 mM),Sonication is recommended. Ethanol: 27 mg/mL (61.71 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2856 mL	11.4278 mL	22.8556 mL
5 mM	0.4571 mL	2.2856 mL	4.5711 mL
10 mM	0.2286 mL	1.1428 mL	2.2856 mL
50 mM	0.0457 mL	0.2286 mL	0.4571 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

Vatolin S, et al. Novel Protein Disulfide Isomerase Inhibitor with Anticancer Activity in Multiple Myeloma. Cancer Res. 2016 Jun 1;76(11):3340-50.
Felder ChB, et al. Ultrasonic atomization and subsequent polymer desolvation for peptide and protein microencapsulation into biodegradable polyesters. J Microencapsul. 2003;20(5):553-567.
Arora S, et al. EZH2 inhibitors are broadly efficacious in multiple myeloma as single agent and in combination with standard of care therapeutics. 2016.
Lang S, et al. Transport and metabolic pathway of thymocartin (TP4) in excised bovine nasal mucosa. J Pharm Pharmacol. 1996;48(11):1190-1196.