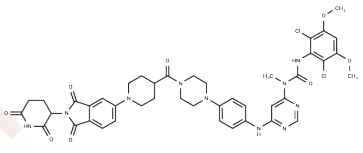
Data Sheet (Cat.No.T86805)

TargetMol

LC-MB12

Chemical Properties



CAS No. : 2828438-38-4

Formula: C43H44Cl2N10O8

Molecular Weight: 899.78

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	LC-MB12 is an orally active, selective and potent PROTAC FGFR2 complex that degrades FGFR2.LC-MB12 has antiproliferative and antitumor activity.LC-MB12 is used in the study of gastric cancer because of its inhibition of FGFR2 signaling.LC-MB12 has been shown to have antiproliferative and antitumor activity.LC-MB12 has been shown to have antiproliferative and antitumor activity.
Targets(IC50)	FGFR,PROTACs
In vitro	0.5-10000 nM LC-MB12, FGFR2 was degraded in KATO III in a time-dependent manner over 3-12 hours, DC50=11.8 nM. [1] 100 nM LC-MB12 treatment for 6 hours resulted in 77% degradation of FGFR2 in KATO III and 43% degradation in NCI-H1581. [1] 1-10000 nM LC-MB12 treatment for 72 h significantly inhibited the growth of KATO III, SNU-16, and NCI-H716 with IC50=29.1 nM (KATO III), IC50=3.7 nM (SNU-16), and IC50=3.2 nM (NCI-H716), respectively, and induced KATO III G0 /G1 phase block. [1]
In vivo	Oral administration of 20 mg/kg LC-MB12 was rapidly absorbed in mice (Cmax: 2.6 h) with oral bioavailability (F: 13%). Oral administration for 30 days was well tolerated and showed no significant hepatotoxicity or nephrotoxicity in mice. [1] 20 mg/kg/day LC-MB12 administered orally for 15 days inhibited tumor growth by 63.1% in the SNU-16 nude mouse xenograft model. [1]

Solubility Information

Solubility	DMSO: 120 mg/mL(133.37 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.1114 mL	5.5569 mL	11.1138 mL
5 mM	0.2223 mL	1.1114 mL	2.2228 mL
10 mM	0.1111 mL	0.5557 mL	1.1114 mL
50 mM	0.0222 mL	0.1111 mL	0.2223 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

Ma L, et al. Discovery of a Selective and Orally Bioavailable FGFR2 Degrader for Treating Gastric Cancer. J Med Chem. 2023 Jun 8;66(11):7438-7453.