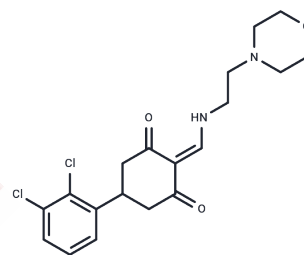


DC-LC3in-D5

Chemical Properties

CAS No. :	2868312-73-4
Formula:	C ₁₉ H ₂₂ Cl ₂ N ₂ O ₃
Molecular Weight:	397.3
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	DC-LC3in-D5 is a potent and selective covalent inhibitor of LC3A/B that disrupts autophagy by covalently binding to Lys49 on LC3B (IC ₅₀ = 200 nM), resulting in impaired LC3B lipidation, accumulation of the autophagy substrate p62, and a significant reduction in the formation of autophagosome vesicles.
Targets(IC50)	Autophagy,ATG,p62
In vitro	DC-LC3in-D5 selectively targets LC3A/B in HeLa cells. In vitro, treatment with DC-LC3in-D5 (3–30μM, 16h) disrupted LC3B lipidation, inhibited autophagosome formation, and led to significant accumulation of p62, indicating effective autophagy inhibition[1].

Solubility Information

Solubility	DMSO: 30 mg/mL (75.51 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.517 mL	12.5849 mL	25.1699 mL
5 mM	0.5034 mL	2.517 mL	5.034 mL
10 mM	0.2517 mL	1.2585 mL	2.517 mL
50 mM	0.0503 mL	0.2517 mL	0.5034 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

Fan S, et al. Inhibition of Autophagy by a Small Molecule through Covalent Modification of the LC3 Protein. Angew Chem Int Ed Engl. 2021 Dec 6;60(50):26105-26114.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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