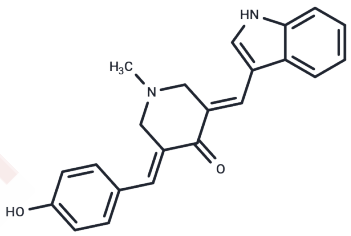
Data Sheet (Cat.No.T73550)

TargetMol

CUR5g

Chemical Properties



CAS No. : 1370032-20-4

Formula: C22H20N2O2

Molecular Weight: 344.41

Storage: Store at low temperature
Store at -20°C
Actual storage temperature shall be subject to the COA.

Biological Description

Description	CUR5g is an autophagy inhibitor that inhibits migration and colony formation in A549 cells and acts through a UVRAG-dependent mechanism by blocking the recruitment of STX17 to autophagosomes.CUR5g is often used in combination with cisplatin for the study of cancer.
Targets(IC50)	Autophagy
In vitro	In A549 cells, CUR5g (at concentrations of 0, 1, 5, 10, 20, and 40 μM; observed at 3, 6, 12, and 24 hours) induces extensive cytoplasmic vacuolization, and the GFP-LC3B signal shifts from diffuse cytosolic staining to a punctate pattern outlining autophagosomes[1].
In vivo	CUR5g (40 mg/kg) and cisplatin (1 mg/kg), administered via the caudal vein every other day for a total of 15 days, were able to retard the growth of xenografted tumors. The combined treatment of CUR5g and cisplatin nearly completely inhibited tumor growth [1].

Solubility Information

Solubility	DMSO: 40 mg/mL (116.14 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: 2 mg/mL (5.81 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9035 mL	14.5176 mL	29.0352 mL
5 mM	0.5807 mL	2.9035 mL	5.807 mL
10 mM	0.2904 mL	1.4518 mL	2.9035 mL
50 mM	0.0581 mL	0.2904 mL	0.5807 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

Chen J, et al. CUR5g, a novel autophagy inhibitor, exhibits potent synergistic anticancer effects with cisplatin against non-small-cell lung cancer. Cell Death Discov. 2022 Oct 31;8(1):435.