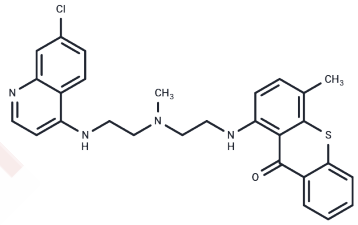
Data Sheet (Cat.No.T16777)

TargetMol

ROC-325

Chemical Properties



CAS No. : 1859141-26-6

Formula: C28H27ClN4OS

Molecular Weight: 503.06

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	ROC-325 is an effective and orally active inhibitor of autophagy with anticancer activity. ROC-325 induces renal cell carcinoma apoptosis and exhibits favorable selectivity.
Targets(IC50)	Apoptosis,Autophagy
In vitro	ROC-325 (5 μM) leads to the formation of LC3B punctae and a robust increase in LC3B levels in both A498 and 786-0 RCC cells. ROC-325 promotes a dose-dependent increase in LC3B expression in a manner that correlated with a corresponding increase in the levels of p62 and cathepsin D. ROC-325 inhibits cells growth with IC50 values of 4.9 μM, 11 μM, 4.6 μM, 5.4 μM, 7.4 μM, 11 μM, 8.2 μM, 5.8 μM, 5.0 μM, 11 μM, 8.4 μM and 6.0 μM for A498, A549, CFPAC-1, COLO-205, DLD-1, IGROV-1, MCF-7, MiaPaCa-2, NCI-H69, PC-3, RL and UACC-62 cells, respectively. ROC-325 induces the deacidification of lysosomes, accumulation of autophagosomes, and disrupted autophagic flux[1].
In vivo	In mice bearing 786-0 RCC xenografts, ROC-325 (25, 40, and 50 mg/kg; oral) leads to significant, dose-dependent inhibition of disease progression and inhibits autophagy in vivo[1].

Solubility Information

Solubility	DMSO: 1 mg/mL (1.99 mM),Sonication is recommended. H2O: 0.8 mg/mL (1.59 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9878 mL	9.9392 mL	19.8783 mL
5 mM	0.3976 mL	1.9878 mL	3.9757 mL
10 mM	0.1988 mL	0.9939 mL	1.9878 mL
50 mM	0.0398 mL	0.1988 mL	0.3976 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

Carew JS, et al. Disruption of Autophagic Degradation with ROC-325 Antagonizes Renal Cell Carcinoma Pathogenesis. Clin Cancer Res. 2017 Jun 1;23(11):2869-2879.