

ROC-325

Catalog No: tcsc0033428



Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

1859141-26-6

Formula:

$C_{28}H_{27}ClN_4OS$

Pathway:

Autophagy

Target:

Apoptosis; Autophagy

Form:

Light yellow to orange (Solid)

Purity / Grade:

99.61%

Solubility:

DMSO : 32 mg/mL (63.61 mM; Need ultrasonic); H₂O : 1 mg/mL (1.99 mM; Need ultrasonic)

Storage Instruction:

Storage temp. 2-8°C

Observed Molecular Weight:

503.06

References

[1]. 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.

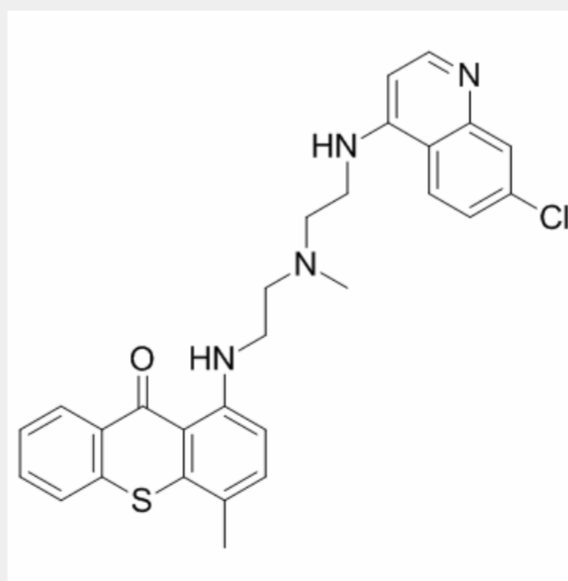
Product Description

ROC-325 is a novel inhibitor of **autophagy**.

IC50 & Target: Autophagy^[1]

In Vitro: ROC-325 is a novel inhibitor of autophagy. Treatment with ROC-325 results in a significant loss of acridine orange fluorescence. ROC-325 triggers a highly significant increase in cathepsin D (*CTSD*) levels. ROC-325 treatment yields pharmacodynamic effects that are consistent with inhibition of autophagy. Treatment with 5 μM ROC-325 for 24 hours leads to the formation of LC3B punctae and a robust increase in LC3B levels in both A498 and 786-0 RCC cells. Immunoblotting analysis conducted in both A498 and 786-0 cells demonstrates that 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^[1].

In Vivo: ROC-325 treatment leads to significant, dose-dependent inhibition of disease progression. ROC-325 is well tolerated and no notable toxicities are observed other than a very modest, nonsignificant reduction in mean body weight at the highest dose. Immunohistochemical analysis of specimens collected from animals treated with ROC-325 demonstrates significant, dose-dependent increases in the autophagic markers LC3B and p62 and increases apoptosis^[1].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!