

# 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); H<sub>2</sub>O : 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.

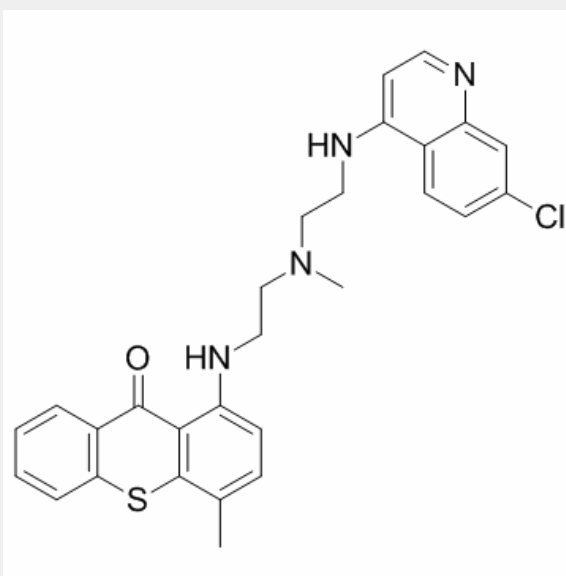
**Product Description**

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

IC50 & Target: Autophagy<sup>[1]</sup>

**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<sup>[1]</sup>.

**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<sup>[1]</sup>.



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