Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

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:

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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].