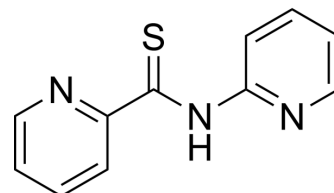


NSC 185058

Cat. No.:	HY-125169
CAS No.:	39122-38-8
Molecular Formula:	C ₁₁ H ₉ N ₃ S
Molecular Weight:	215.27
Target:	Autophagy; Atg4
Pathway:	Autophagy
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 125 mg/mL (580.67 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	4.6453 mL	23.2266 mL	46.4533 mL
	5 mM	0.9291 mL	4.6453 mL	9.2907 mL
	10 mM	0.4645 mL	2.3227 mL	4.6453 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.08 mg/mL (9.66 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.08 mg/mL (9.66 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.08 mg/mL (9.66 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

NSC 185058 is an inhibitor of ATG4B, a major cysteine protease. Inhibition of ATG4B using NSC 185058 markedly attenuates autophagic activity^[1].

IC₅₀ & Target

ATG4B^[1]
Autophagy^[1]

In Vivo

NSC185058 is an ATG4B antagonist. ATG4B stimulates autophagy by promoting autophagosome formation through reversible modification of ATG8. Inclusion of the ATG4B inhibitor NSC185058 enhances the anti-tumor activity of radiation

therapy (RT). NSC185058 decreases glioblastoma (GBM) cell tumorigenicity, and enhances the anti-tumor activity of RT when applied to orthotopic GBM xenograft models^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Huang T, et al. MST4 Phosphorylation of ATG4B Regulates Autophagic Activity, Tumorigenicity, and Radioresistance in Glioblastoma. *Cancer Cell*. 2017 Dec 11;32(6):840-855.e8.

Caution: Product has not been fully validated for medical applications. For research use only.

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