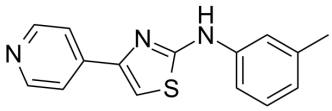
STF-62247

Cat. No.:	HY-100746
CAS No.:	315702-99-9
Molecular Formula:	$C_{15}H_{13}N_3S$
Molecular Weight:	267.35
Target:	Autophagy
Pathway:	Autophagy

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (187.02 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.7404 mL	18.7021 mL	37.4041 mL
	5 mM	0.7481 mL	3.7404 mL	7.4808 mL
	10 mM	0.3740 mL	1.8702 mL	3.7404 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (9.35 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (9.35 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

STF-62247 is an autophagy inducer that selectively cytotoxic to VHL-deficient renal cell carcinoma (IC_{50} of 0.625 μM and 16 μM in RCC4 and RCC4/VHL cells, respectively)[1].

In Vitro

In RCC4, RCC4/VHL, SN12C, SN12C-VHL shRNA cells, STF-62247 (0-30 μM) is selectively toxic to VHL-deficient cells compared to their VHL wild-type counterparts[1].
STF-62247-treated cells accumulated intracytoplasmic vacuoles characteristic of cells undergoing autophagy. Moreover, these vacuoles are larger in VHL-deficient RCC4 and SN12C-VHL shRNA cells than in wild-type VHL cells[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

STF-62247 (2.7-8 mg/kg; intraperitoneal injection; daily; for 9 days) treatment significantly reduces tumor growth of VHL-

deficient cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	SCID mice implanted with SN12C-VHL shRNA cells[1]
Dosage:	2.7 mg/kg, or 8 mg/kg
Administration:	Intraperitoneal injection; daily; for 9 days
Result:	Significantly reduced tumor growth of VHL-deficient cells.

REFERENCES

[1]. Turcotte, S. et al. A molecule targeting VHL-deficient renal cell carcinoma that induces autophagy. Cancer cell 14, 90-102, doi:10.1016/j.ccr.2008.06.004 (2008)

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

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