SRS11-92

Cat. No.: HY-116087

CAS No.: 1467047-25-1

Molecular Formula: $C_{22}H_{28}N_2O_2$

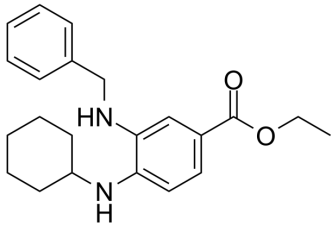
Molecular Weight: 352.47

Target: Ferroptosis

Pathway: Apoptosis

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (709.28 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.8371 mL	14.1856 mL	28.3712 mL
	5 mM	0.5674 mL	2.8371 mL	5.6742 mL
	10 mM	0.2837 mL	1.4186 mL	2.8371 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.08 mg/mL (5.90 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (5.90 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

SRS11-92, a Ferrostatin-1 (Fer-1) analogue, is a potent ferroptosis inhibitor. SRS11-92 inhibits ferroptotic cell death induced by Erastin in HT-1080 human fibrosarcoma cells (EC_{50}=6 nM)[1].

In Vitro

SRS11-92 fully protects oligodendrocytes (OLs) from cystine deprivation when tested at 100 nM. SRS11-92 rescues primary human fibroblasts from death induced by frataxin knock-down[2].

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

In Vivo

SRS11-92, used at 500 nM, is efficacious in protecting human and mouse cellular models of Friedreich ataxia (FRDA) treated with ferric ammonium citrate (FAC) and an inhibitor of glutathione synthesis (BSO), whereas caspase-3 inhibitors fail to show significant biological activity[2].

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

REFERENCES

[1]. Skouta R, et al. Ferrostatins inhibit oxidative lipid damage and cell death in diverse disease models. J Am Chem Soc. 2014;136(12):4551-4556.

[2]. Cotticelli MG, et al. Ferroptosis as a Novel Therapeutic Target for Friedreich's Ataxia. J Pharmacol Exp Ther. 2019;369(1):47-54.

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