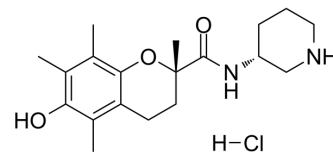


Sonlicromanol hydrochloride

Cat. No.:	HY-120332
CAS No.:	2162149-24-6
Molecular Formula:	C ₁₉ H ₂₉ ClN ₂ O ₃
Molecular Weight:	368.9
Target:	Reactive Oxygen Species
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
Storage:	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 170 mg/mL (460.83 mM; Need ultrasonic)
 H₂O : ≥ 100 mg/mL (271.08 mM)
 * "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.7108 mL	13.5538 mL	27.1076 mL
	5 mM	0.5422 mL	2.7108 mL	5.4215 mL
	10 mM	0.2711 mL	1.3554 mL	2.7108 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 5 mg/mL (13.55 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 4.25 mg/mL (11.52 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 4.25 mg/mL (11.52 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Sonlicromanol (KH176) hydrochloride, a chemical entity derivative of Trolox, is a blood-brain barrier permeable ROS-redox modulator. Sonlicromanol (KH176) hydrochloride is used in the study for mitochondrial disorders^[1].

In Vivo

Sonlicromanol (KH176) hydrochloride maintains microstructural coherence in the brain of Ndufs4^{-/-} mice^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Ndufs4 ^{-/-} mice (Leigh Disease model) ^[1] .
Dosage:	10 mg/kg.
Administration:	IP, daily (PD14-PD45, 32 days).
Result:	Significantly improve rotarod and gait performance and reduced the degeneration of retinal ganglion cells. Resulted in statistically significantly higher FA values in the external capsule and a similar trend was found in the cerebral peduncle.

REFERENCES

[1]. Ria de Haas, et al. Therapeutic effects of the mitochondrial ROS-redox modulator KH176 in a mammalian model of Leigh Disease. Sci Rep. 2017 Sep 15;7(1):11733.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA