

Sonlicromanol hydrochloride

Chemical Properties

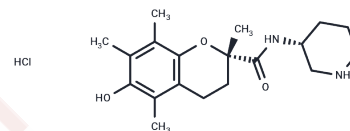
CAS No. : 2162149-24-6

Formula: C₁₉H₂₉ClN₂O₃

Molecular Weight: 368.9

Storage: Store under nitrogen, Keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Sonlicromanol hydrochloride (KH176 hydrochloride) is a ROS-redox modulator that crosses the blood-brain barrier, has potential anticancer activity, improves m.3243A>G heterogeneity in iPSC-derived neurons associated with It has potential anticancer activity, ameliorates neuronal network dysfunction and transcriptomic changes associated with m.3243A>G heterogeneity in iPSC-derived neurons, and can be used for the treatment of mitochondrial diseases.
Targets(IC50)	Reactive Oxygen Species, ROS
In vivo	In Ndufs4-/- mice (Leigh Disease model), Sonlicromanol hydrochloride (10 mg/kg; intraperitoneal injection, once daily) significantly improved rotarod and gait performance, reduced degeneration of retinal ganglion cells. Additionally, it resulted in significantly higher FA values in the external capsule and showed a similar trend in the cerebral peduncle[1].

Solubility Information

Solubility	DMSO: 150 mg/mL (406.61 mM), Sonication is recommended. H ₂ O: 80 mg/mL (216.86 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (13.55 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.0542 mL	0.2711 mL	0.5422 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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.

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