

Demethyleneberberine

Chemical Properties

CAS No. : 25459-91-0

Formula: C₁₉H₁₈NO₄

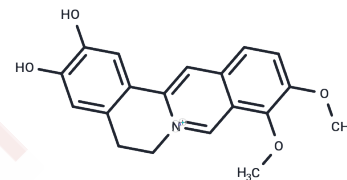
Molecular Weight: 324.35

Keep away from direct sunlight, Keep away from moisture

Storage:

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	Demethyleneberberine, which is composed of a potential antioxidant structure, could penetrate the membrane of mitochondria and accumulate in mitochondria either in vitro or in vivo. Demethyleneberberine suppresses CYP2E1, hypoxia inducible factor α , and inducible nitric oxide synthase, which contributes to oxidative stress and restored sirtuin 1/AMP-activated protein kinase/peroxisome proliferator-activated receptor- γ coactivator-1 α pathway-associated fatty acid oxidation in chronic ethanol-fed mice.
Targets(IC50)	NOS, NF- κ B, HIF, AMPK, Cytochromes P450

Solubility Information

Solubility	DMSO: 125 mg/mL (385.39 mM), when pH is adjusted to 8 with NaOH. Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0831 mL	15.4154 mL	30.8309 mL
5 mM	0.6166 mL	3.0831 mL	6.1662 mL
10 mM	0.3083 mL	1.5415 mL	3.0831 mL
50 mM	0.0617 mL	0.3083 mL	0.6166 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

Zhang P1, et al. Demethyleneberberine, a natural mitochondria-targeted antioxidant, inhibits mitochondrial dysfunction, oxidative stress, and steatosis in alcoholic liver disease mouse model. *J Pharmacol Exp Ther.* 2015 Jan; 352(1):139-47.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481