Ursocholic acid

Cat. No.: HY-113212

CAS No.: 2955-27-3

Molecular Formula: $C_{24}H_{40}O_5$

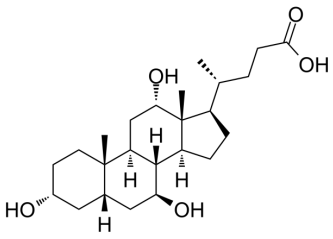
Molecular Weight: 408.57

Target: Endogenous Metabolite

Pathway: Metabolic Enzyme/Protease

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (244.76 mM; Need ultrasonic)

H_2O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.4476 mL	12.2378 mL	24.4756 mL
5 mM	0.4895 mL	2.4476 mL	4.8951 mL
10 mM	0.2448 mL	1.2238 mL	2.4476 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 (6.12 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.12 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.12 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Ursocholic acid, a bile acid found predominantly in bile of mammals, is transformed into deoxycholic acid by the intestinal microflora in mice. Ursodeoxycholic acid is an inhibitor of 7α-hydroxysteroid dehydrogenase and hepatocyte nuclear factor 1α[1].

IC_{50} & Target

Human Endogenous Metabolite

REFERENCES

[1]. MacDonald IA, et al. Formation of ursodeoxycholic acid from chenodeoxycholic acid by a 7 beta-hydroxysteroid dehydrogenase-elaborating Eubacterium aerofaciens strain cocultured with 7 alpha-hydroxysteroid dehydrogenase-elaborating organisms. Appl Environ Microbiol. 1982 Nov;44(5):1187-95.

[2]. Lee HI, et al. Ursodeoxycholic acid, an inhibitor of hepatocyte nuclear factor 1α, did not increase the systemic exposure of pitavastatin. Int J Clin Pharmacol Ther. 2014 Nov;52(11):981-5.

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