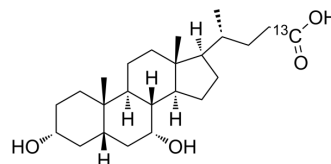


Chenodeoxycholic acid-¹³C

Cat. No.:	HY-76847S2
CAS No.:	52918-92-0
Molecular Formula:	C ₂₃ ¹³ CH ₄₀ O ₄
Molecular Weight:	393.56
Target:	FXR; Autophagy; Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease; Autophagy
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 125 mg/mL (317.61 mM; Need ultrasonic)					
	DMSO : 125 mg/mL (317.61 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		2.5409 mL	12.7045 mL	25.4091 mL
5 mM			0.5082 mL	2.5409 mL	5.0818 mL	
	10 mM		0.2541 mL	1.2705 mL	2.5409 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: ≥ 2.08 mg/mL (5.29 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (5.29 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.29 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	Chenodeoxycholic acid- ¹³ C is the ¹³ C-labeled Chenodeoxycholic Acid. Chenodeoxycholic Acid is a hydrophobic primary bile acid that activates nuclear receptors (FXR) involved in cholesterol metabolism.
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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- [4]. Kawabe Y, et al. The molecular mechanism of the induction of the low density lipoprotein receptor by chenodeoxycholic acid in cultured human cells. *Biochem Biophys Res Commun.* 1995 Mar 8;208(1):405-11.
- [5]. Ao M, et al. Chenodeoxycholic acid stimulates Cl(-) secretion via cAMP signaling and increases cystic fibrosis transmembrane conductance regulator phosphorylation in T84 cells. *Am J Physiol Cell Physiol.* 2013 Aug 15;305(4):C447-56
- [6]. Noh K, et al. Farnesoid X receptor activation by chenodeoxycholic acid induces detoxifying enzymes through AMP-activated protein kinase and extracellular signal-regulated kinase 1/2-mediated phosphorylation of CCAAT/enhancer binding protein β . *Drug Metab*
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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