Product Data Sheet

Cholic acid-13C

Cat. No.: HY-N0324S2 CAS No.: 52886-36-9 Molecular Formula: C₂₃¹³CH₄₀O₅ Molecular Weight: 409.56

Target: **Endogenous Metabolite** Pathway: Metabolic Enzyme/Protease

-20°C Storage: Powder 3 years

> 2 years -80°C In solvent 6 months

> > -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: ≥ 100 mg/mL (244.16 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.4416 mL	12.2082 mL	24.4164 mL
	5 mM	0.4883 mL	2.4416 mL	4.8833 mL
	10 mM	0.2442 mL	1.2208 mL	2.4416 mL

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

BIOLOGICAL ACTIVITY

Description Cholic $acid^{-13}C$ is the ^{13}C -labeled Cholic acid. Cholic acid is a major primary bile acid produced in the liver and usually conjugated with glycine or taurine. It facilitates fat absorption and cholesterol excretion.

> 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

In Vitro

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. Li Y, et al. Mechanism of hepatic targeting via oral administration of DSPE-PEG-Cholic acid-modified nanoliposomes. Int J Nanomedicine. 2017 Feb 28;12:1673-1684.

3]. Pan X, et al. Cholic acid Fee	eding Leads to Increased CY	P2D6 Expression in CYP2D6-Hun	nanized Mice. Drug Metab Dispos. 2017 Ap	or;45(4):346-352.
	Caution: Product has	not been fully validated for n	nedical applications. For research us	e only.
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