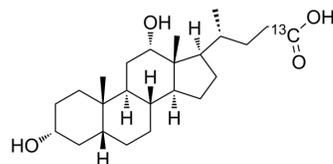


Deoxycholic acid-¹³C

Cat. No.:	HY-N0593S3		
CAS No.:	52886-37-0		
Molecular Formula:	C ₂₃ ¹³ CH ₄₀ O ₄		
Molecular Weight:	393.56		
Target:	G protein-coupled Bile Acid Receptor 1; Endogenous Metabolite		
Pathway:	GPCR/G Protein; 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 (254.09 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	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.

BIOLOGICAL ACTIVITY

Description

Deoxycholic acid-¹³C is the ¹³C-labeled Deoxycholic acid. Deoxycholic acid is specifically responsible for activating the G protein-coupled bile acid receptor TGR5 that stimulates brown adipose tissue (BAT) thermogenic activity.

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

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
 [2]. Somm E, et al. β-Klotho deficiency protects against obesity through a crosstalk between liver, microbiota, and brown adipose tissue. *JCI Insight.* 2017 Apr 20;2(8). pii:

91809.

[3]. Wang X, et al. Acidified bile acids enhance tumor progression and telomerase activity of gastric cancer in micedependent on c-Myc expression. Cancer Med. 2017 Apr;6(4):788-797.

Caution: Product has not been fully validated for medical applications. For research use only.

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