

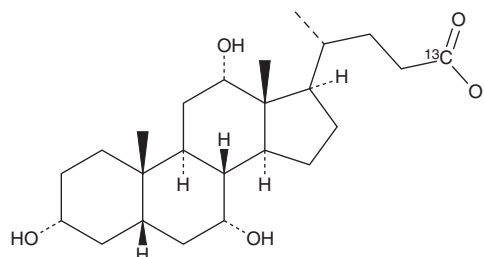
PRODUCT INFORMATION



Cholic Acid-24-¹³C

Item No. 40288

CAS Registry No.: 52886-36-9
Formal Name: (5 β)-3 α ,7 α ,12 α -trihydroxy-cholan-24-oic-24-¹³C acid
Synonyms: Cholalic Acid-¹³C, Cholalin-¹³C
MF: C₂₃[¹³C]H₄₀O₅
FW: 409.6
Purity: $\geq$ 98%
Supplied as: A solid
Storage: -20°C
Stability: $\geq$ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Cholic acid-24-¹³C is supplied as a solid. A stock solution may be made by dissolving the cholic acid-24-¹³C in the solvent of choice, which should be purged with an inert gas. Cholic acid-24-¹³C is soluble in acetone, methanol, and DMSO.

Description

Cholic acid-24-¹³C is intended for use as an internal standard for the quantification of cholic acid (Item No. 20250) by GC- or LC-MS. Cholic acid-24-¹³C is an isotopically labeled form of cholic acid containing ¹³C at the carbon-24 position. Cholic acid is a primary bile acid.¹ It is formed from cholesterol *via* a multistep process catalyzed by the cytochrome P450 (CYP) isoforms CYP7A1, CYP8B1, and CYP27A1. Cholic acid is conjugated to glycine or taurine by bile acid-CoA:amino acid N-acyltransferase (BAAT) to produce glycocholic acid (GCA; Item No. 20276) and taurocholic acid (TCA; Item No. 16215), respectively, in the liver, and is transformed into the secondary bile acid deoxycholic acid (DCA; Item No. 20756) by intestinal microbiota.¹⁻³ It induces *C. difficile* colony formation in an agar dilution assay when used at a concentration of 0.1% w/v.⁴ Dietary administration of cholic acid (0.4% w/w) increases serum cholesterol levels, biliary phospholipid secretion, and fecal DCA levels in rats.⁵

References

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- Uchida, K., Nomura, Y., and Takeuchi, N. Effects of cholic acid, chenodeoxycholic acid, and their related bile acids on cholesterol, phospholipid, and bile acid levels in serum, liver, bile, and feces of rats. *J. Biochem.* **87(1)**, 187-194 (1980).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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