

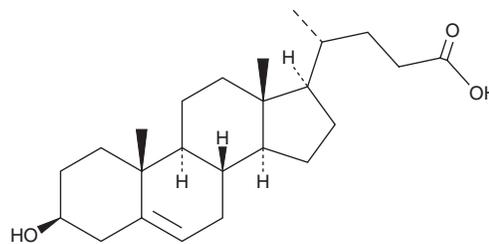
PRODUCT INFORMATION



Cholenic Acid

Item No. 29543

CAS Registry No.: 5255-17-4
Formal Name: 3 β -hydroxy-chole-5-en-24-oic acid
Synonym: 3 β -hydroxy-5-Cholenic Acid
MF: C₂₄H₃₈O₃
FW: 374.6
Purity: \geq 98%
Supplied as: A crystalline 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

Cholenic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the cholenic acid in the solvent of choice, which should be purged with an inert gas. Cholenic acid is soluble in the organic solvent dimethyl formamide (DMF) at a concentration of approximately 5 mg/ml.

Cholenic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, cholenic acid should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Cholenic acid has a solubility of approximately 0.25 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Cholenic acid is a monohydroxy bile acid.¹ It is a cholesterol oxidation product formed by 7 α -hydroxylation of 27-hydroxycholesterol (Item Nos. 14790 | 14791), as well as a precursor in the biosynthesis of chenodeoxycholic acid (Item No. 10011286). Levels of cholenic acid are increased in patients with neonatal liver disease harboring mutations in CYP7A1, the gene encoding 7 α -hydroxylase, as well as in patients with intrahepatic and extrahepatic cholestasis.^{2,3}

References

1. Lee, C., Martin, K.O., and Javitt, N.B. Bile acid synthesis: 7 α -Hydroxylation of intermediates in the sterol 27-hydroxylase metabolic pathway. *J. Lipid. Res.* **37(6)**, 1356-1362 (2006).
2. Setchell, K.D.R., Schwarz, M., O'Connell, N.C., *et al.* Identification of a new inborn error in bile acid synthesis: Mutation of the oxysterol 7 α -hydroxylase gene causes severe neonatal liver disease. *J. Clin. Invest.* **102(9)**, 1690-1703 (1998).
3. Sugiyama, K., Okuyama, S., Imoto, M., *et al.* Clinical evaluation of serum 3 β -hydroxy-5-cholenic acid in hepatobiliary disease. *Gastroenterologia Japonica* **21(6)**, 608-616 (1986).

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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