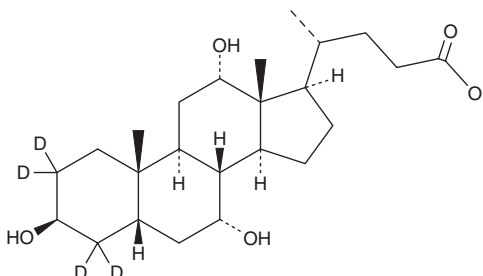


PRODUCT INFORMATION



3 β -Cholic Acid-d₄ Item No. 27376

Formal Name:	(5 β)-3 β ,7 α ,12 α -trihydroxy-cholan-24-oic-2,2,4,4-d ₄ acid
Synonym:	3 β -Epicholic Acid-d ₄
MF:	C ₂₄ H ₃₆ D ₄ O ₅
FW:	412.6
Chemical Purity:	≥95% (3 β -Cholic Acid)
Deuterium Incorporation:	≥99% deuterated forms (d ₁ -d ₄); ≤1% d ₀
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years



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

Laboratory Procedures

3 β -Cholic acid-d₄ is intended for use as an internal standard for the quantification of 3 β -cholic acid (Item No. 36447) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

3 β -Cholic acid-d₄ is supplied as a crystalline solid. A stock solution may be made by dissolving the 3 β -cholic acid-d₄ in the solvent of choice. 3 β -Cholic acid-d₄ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 3 β -cholic acid-d₄ in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

3 β -Cholic acid is a bile acid and an isomer of cholic acid (Item No. 20250).¹ It has been found in human cecum and in postprandial urine samples from patients with non-alcoholic steatohepatitis (NASH).^{1,2}

References

1. Hamilton, J.P., Xie, G., Raufman, J.P., *et al.* Human cecal bile acids: Concentration and spectrum. *Am. J. Physiol. Gastrointest. Liver Physiol.* **293**(1), G256-G263 (2007).
2. Lan, K., Su, M., Xie, G., *et al.* Key role for the 12-hydroxy group in the negative ion fragmentation of unconjugated C24 bile acids. *Anal. Chem.* **88**(14), 7041-7048 (2016).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 03/03/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM