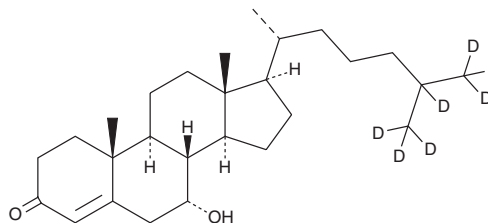


PRODUCT INFORMATION



7 α -hydroxy-4-Cholesten-3-one-d₇ Item No. 26100

CAS Registry No.: 2260669-17-6
Formal Name: (7 α)-7-hydroxy-cholest-4-en-3-one-25,26,26,26,27,27,27-d₇
MF: C₂₇H₃₇D₇O₂
FW: 407.7
Chemical Purity: $\geq 98\%$ (7 α -hydroxy-4-Cholesten-3-one)
Deuterium Incorporation: $\geq 99\%$ deuterated forms (d₁-d₇); $\leq 1\%$ d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years



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

Laboratory Procedures

7 α -hydroxy-4-Cholesten-3-one-d₇ is intended for use as an internal standard for the quantification of 7 α -hydroxy-4-cholesten-3-one (Item No. 25442) 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).

7 α -hydroxy-4-Cholesten-3-one-d₇ is supplied as a solid. A stock solution may be made by dissolving the 7 α -hydroxy-4-cholesten-3-one-d₇ in the solvent of choice, which should be purged with an inert gas. 7 α -hydroxy-4-Cholesten-3-one-d₇ is slightly soluble in chloroform.

Description

7 α -hydroxy-4-Cholesten-3-one is a metabolite of 7 α -hydroxy cholesterol and an intermediate in the biosynthesis of bile acids.¹ Plasma levels of 7 α -hydroxy-4-cholesten-3-one positively correlate with the rate of bile acid synthesis in humans and are increased in patients following ileal resection.²

References

1. Russell, D.W. The enzymes, regulation, and genetics of bile acid synthesis. *Annu. Rev. Biochem.* **72**, 137-174 (2003).
2. Axelson, M., Aly, A., and Sjövall, J. Levels of 7 α -hydroxy-4-cholesten-3-one in plasma reflect rates of bile acid synthesis in man. *FEBS Lett.* **239**(2), 324-328 (1988).

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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