

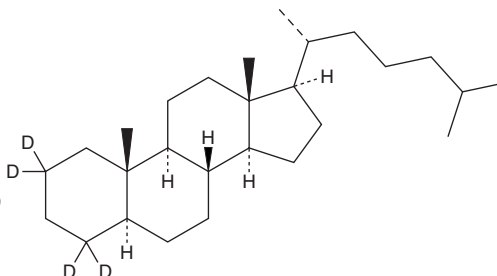
PRODUCT INFORMATION



5 α -Cholestane-d₄

Item No. 43798

CAS Registry No.: 205529-74-4
Formal Name: (5 α)-cholestane-1,1,4,4-d₄
MF: C₂₇H₄₄D₄
FW: 376.7
Chemical Purity: $\geq 98\%$ (5 α -Cholestane)
Deuterium
Incorporation: $\geq 99\%$ deuterated forms (d₁-d₄); $\leq 1\%$ 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

5 α -Cholestane-d₄ is intended for use as an internal standard for the quantification of 5 α -cholestane (Item No. 26763) 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).

5 α -Cholestane-d₄ is supplied as a solid. A stock solution may be made by dissolving the 5 α -cholestane-d₄ in the solvent of choice, which should be purged with an inert gas. 5 α -Cholestane-d₄ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 5 α -cholestane-d₄ in DMSO is approximately 100 μ g/ml and in ethanol and DMF is approximately 20 and 1 mg/ml, respectively.

Description

5 α -Cholestane is a sterol that has been found in dust samples from urban and rural paved and agricultural and public unpaved roads.¹ It has been used as an internal standard for the quantification of phytosterols by HPLC-MS/MS and fecal sterols by GC-FID and GC-MS.^{2,3}

References

1. Rogge, W.F., Medeiros, P.M., and Simoneit, B.R.T. Organic compounds in dust from rural and urban paved and unpaved roads taken during the San Joaquin Valley fugitive dust characterization study. *Environ. Eng. Sci.* **29**(1), 1-13 (2012).
2. Mingyai, S., Strikaeo, K., Kettawan, A., *et al.* Effects of extraction methods on phytochemicals of rice bran oils produced from colored rice. *J. Oleo. Sci.* **67**(2), 135-142 (2018).
3. Schönning, C., Leeming, R., and Stenström, T.A. Faecal contamination of source-separated human urine based on the content of faecal sterols. *Water Res.* **36**(8), 1965-1972 (2002).

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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