

# PRODUCT INFORMATION

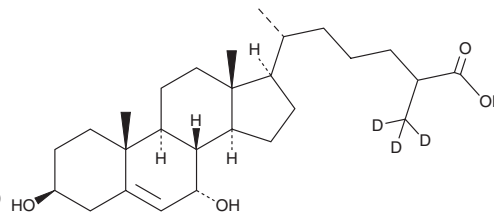


## 3 $\beta$ ,7 $\alpha$ -Dihydroxycholest-5-enoic Acid-d<sub>3</sub>

Item No. 29538

CAS Registry No.: 2342573-95-7  
Formal Name: 3 $\beta$ ,7 $\alpha$ -dihydroxy-cholest-5-en-26-oic-  
27,27,27-d<sub>3</sub>  
MF: C<sub>27</sub>H<sub>41</sub>D<sub>3</sub>O<sub>4</sub>  
FW: 435.7  
Chemical Purity:  $\geq 95\%$  (mixture of diastereomers)  
(3 $\beta$ ,7 $\alpha$ -dihydroxycholest-5-enoic acid)

Deuterium  
Incorporation:  $\geq 99\%$  deuterated forms (d<sub>1</sub>-d<sub>3</sub>);  $\leq 1\%$  d<sub>0</sub>  
Supplied as: A crystalline solid  
Storage: -20°C  
Stability:  $\geq 2$  years



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

### Laboratory Procedures

3 $\beta$ ,7 $\alpha$ -Dihydroxycholest-5-enoic acid-d<sub>3</sub> is intended for use as an internal standard for the quantification of 3 $\beta$ ,7 $\alpha$ -dihydroxycholest-5-enoic acid 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 $\beta$ ,7 $\alpha$ -Dihydroxycholest-5-enoic acid-d<sub>3</sub> is supplied as a crystalline solid. A stock solution may be made by dissolving the 3 $\beta$ ,7 $\alpha$ -dihydroxycholest-5-enoic acid-d<sub>3</sub> in the solvent of choice, which should be purged with an inert gas. 3 $\beta$ ,7 $\alpha$ -Dihydroxycholest-5-enoic acid-d<sub>3</sub> is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 3 $\beta$ ,7 $\alpha$ -dihydroxycholest-5-enoic acid-d<sub>3</sub> in these solvents is approximately 30 mg/ml.

### Description

3 $\beta$ ,7 $\alpha$ -Dihydroxycholest-5-enoic acid is a metabolite of the cholesterol metabolite cholestenoic acid (Item No. 21859) and a bile acid biosynthetic intermediate.<sup>1,2</sup>

### References

1. Meaney, S., Babiker, A.G., Lütjohann, D., *et al.* On the origin of the cholestenoic acids in human circulation. *Steroids* **68**(7-8), 595-601 (2003).
2. Axelson, M., Mörk, B., and Sjövall, J. Occurrence of 3 $\beta$ -hydroxy-5-cholestenoic acid, 3 $\beta$ ,7 $\alpha$ -dihydroxy-5-cholestenoic acid, and 7 $\alpha$ -hydroxy-3-oxo-4-cholestenoic acid as normal constituents in human blood. *J. Lipid. Res.* **29**(5), 629-641 (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.

#### WARRANTY AND LIMITATION OF REMEDY

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