

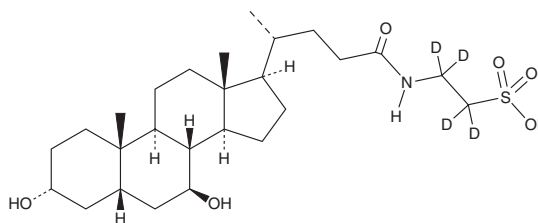
PRODUCT INFORMATION



Tauro-d₄-ursodeoxycholic Acid

Item No. 39851

CAS Registry No.: 2573035-17-1
Formal Name: 2-[[[(3 α ,5 β ,7 β)-3,7-dihydroxy-24-oxocholan-24-yl]amino]-ethane-1,1,2,2-d₄-sulfonic acid
Synonyms: 3 α ,7 β -dihydroxy-5 β -cholanoyl Taurine-d₄, TUDCA-d₄, UR-906-d₄
MF: C₂₆H₄₁D₄NO₆S
FW: 503.7
Chemical Purity: \geq 95% (Tauroursodeoxycholic Acid)
Deuterium Incorporation: \geq 99% deuterated forms (d₁-d₄); \leq 1% d₀
Supplied as: A 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

Tauro-d₄-ursodeoxycholic acid (TUDCA-d₄) is intended for use as an internal standard for the quantification of TUDCA (Item Nos. 20277 | 9003379) 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).

TUDCA-d₄ is supplied as a solid. A stock solution may be made by dissolving the TUDCA-d₄ in the solvent of choice, which should be purged with an inert gas. TUDCA-d₄ is soluble in ethanol and DMSO.

Description

TUDCA is a taurine-conjugated form of the secondary bile acid ursodeoxycholic acid (Item No. 15121).^{1,2} TUDCA is found in small quantities in human bile but at a higher concentration in the bile of black bears.² It demonstrates anti-apoptotic activity in rodent models of tauopathy, Huntington's disease, ischemic brain injury, and retinal disorders.^{2,3}

References

1. Beuers, U. Effects of bile acids on hepatocellular signaling and secretion. *Yale J. Biol. Med.* **70(4)**, 341-346 (1997).
2. Boatright, J.H., Nickerson, J.M., Moring, A.G., et al. Bile acids in treatment of ocular disease. *J. Ocul. Biol. Dis. Infor.* **2(3)**, 149-159 (2009).
3. Vang, S., Longley, K., Steer, C.J., et al. The unexpected uses of urso- and tauroursodeoxycholic acid in the treatment of non-liver diseases. *Glob. Adv. Health Med.* **3(3)**, 58-69 (2014).

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, 10/18/2023

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