

PRODUCT INFORMATION



Taurohyodeoxycholic Acid MaxSpec® Standard

Item No. 31614

CAS Registry No.: 2958-04-5

Formal Name: 2-[[[(3 α ,5 β ,6 α)-3,6-dihydroxy-24-oxocholan-24-yl]amino]-ethanesulfonic acid

Synonyms: Taurine Hyodeoxycholate, THDCA

MF: C₂₆H₄₅NO₆S

FW: 499.7

Purity: $\geq 95\%$

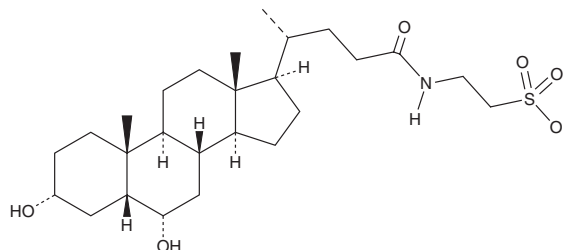
Supplied as: A solution in methanol; in a deactivated glass ampule

Concentration: 100 $\mu\text{g/ml}$ (nominal); see certificate of analysis for verified concentration

Storage: -20°C

Stability: ≥ 5 years; Stability testing is ongoing to ensure concentration accuracy. The certificate of analysis and product expiry date will be updated upon completion of testing.

Special Conditions: Store upright and unopened at -20°C. Warm to room temperature prior to opening. Light sensitive.



Description

Taurohyodeoxycholic acid (THDCA) is a taurine-conjugated form of the secondary bile acid hyodeoxycholic acid (Item No. 20294).¹ THDCA decreases the size and weight of human gallstones *in vitro*. It increases bile flow, biliary cholesterol secretion, and biliary lipid secretion in rats.² Co-administration of THDCA with taurochenodeoxycholic acid (TCDCA; Item No. 20275) prevents TCDCA-induced hepatotoxicity, increasing bile flow as well as biliary acid and phospholipid secretion in rats.³ THDCA also reduces myeloperoxidase activity, expression of TNF- α and IL-6, and colonic damage in a mouse model of TNBS-induced ulcerative colitis.⁴

Taurohyodeoxycholic acid MaxSpec® standard is a quantitative grade standard of taurohyodeoxycholic acid (sodium salt) (Item No. 21956) that has been prepared specifically for mass spectrometry and related applications where quantitative reproducibility is required. The solution has been prepared gravimetrically and is supplied in a deactivated glass ampule sealed under argon. The concentration was verified by comparison to an independently prepared calibration standard. Verified concentration is provided on the certificate of analysis. This taurohyodeoxycholic acid MaxSpec® standard is guaranteed to meet identity, purity, stability, and concentration specifications and is provided with a batch-specific certificate of analysis. Ongoing stability testing is performed to ensure the concentration remains accurate throughout the shelf life of the product. **Note:** The amount of solution added to the vial is in excess of the listed amount. Therefore, it is necessary to accurately measure volumes for preparation of calibration standards. Follow recommended storage and handling conditions to maintain product quality.

References

1. Angelico, M., Mogavero, L., Baiocchi, L., et al. Dissolution of human cholesterol gallstones in bile salt/lecithin mixtures: effect of bile salt hydrophobicity and various pHs. *Scand. J. Gastroenterol.* **30**(12), 1178-1185 (1995).
2. Angelico, M., Baiocchi, L., Nistri, A., et al. Effect of taurohyodeoxycholic acid, a hydrophilic bile salt, on bile salt and biliary lipid secretion in the rat. *Dig. Dis. Sci.* **39**(11), 2389-2397 (1994).
3. Roda, A., Piazza, F., Baraldini, M., et al. Taurohyodeoxycholic acid protects against taurochenodeoxycholic acid-induced cholestasis in the rat. *Hepatology* **27**(2), 520-525 (1998).
4. He, J., Liang, J., Zhu, S., et al. Protective effect of taurohyodeoxycholic acid from Pulvis Fellis Suis on trinitrobenzene sulfonic acid induced ulcerative colitis in mice. *Eur. J. Pharmacol.* **670**(1), 229-235 (2011).

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.

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