# PRODUCT INFORMATION



## Tauroursodeoxycholic Acid MaxSpec® Standard

Item No. 31605

CAS Registry No.: 14605-22-2

Formal Name:  $2-[[(3\alpha,5\beta,7\beta)-3,7-dihydroxy-24-oxocholan-$ 

24-yl]amino]-ethanesulfonic acid

Synonyms: 3α,7β-dihydroxy-5β-cholanoyl Taurine,

TUDCA, UR-906

MF: C<sub>26</sub>H<sub>45</sub>NO<sub>6</sub>S

FW: 499.7 **Purity:** ≥95%

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

Concentration: 100.0 µg/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

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

TUDCA MaxSpec® standard is a quantitative grade standard of TUDCA (Item No. 20277) that has been prepared specifically for mass spectrometry or any application 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. This TUDCA 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. Beuers, U. Effects of bile acids on hepatocellular signaling and secretion. Yale J. Biol. Med. 70(4), 341-346
- 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.

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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