

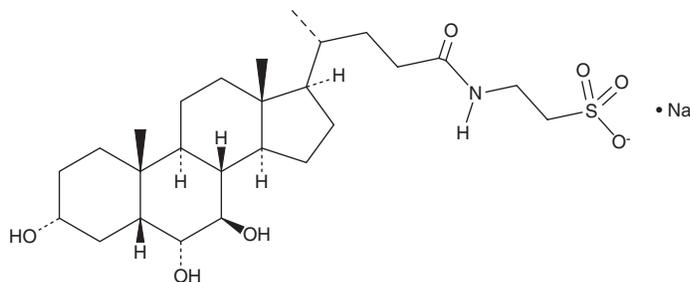
PRODUCT INFORMATION



Tauro- ω -muricholic Acid (sodium salt)

Item No. 28842

CAS Registry No.: 2456348-84-6
Formal Name: 2-[[[(3 α ,5 β ,6 α ,7 β)-3,6,7-trihydroxy-24-oxocholan-24-yl]amino]-ethanesulfonic acid, monosodium salt
Synonyms: T- ω -MCA, TOMCA
MF: C₂₆H₄₄NO₇S • Na
FW: 537.7
Purity: \geq 95%
Supplied as: A lyophilized powder
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

Tauro- ω -muricholic acid (sodium salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the tauro- ω -muricholic acid (sodium salt) in the solvent of choice, which should be purged with an inert gas. Tauro- ω -muricholic acid (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of tauro- ω -muricholic acid (sodium salt) in ethanol is approximately 1 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Tauro- ω -muricholic acid (sodium salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, tauro- ω -muricholic acid (sodium salt) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Tauro- ω -muricholic acid (sodium salt) has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Tauro- ω -muricholic acid is a taurine-conjugated form of the secondary bile acid ω -muricholic acid (Item No. 20292). Hepatic levels of tauro- ω -muricholic acid are decreased in mice following a diet supplemented with cholic, deoxycholic, chenodeoxycholic, or ursodeoxycholic acid and in a high-fat diet-induced mouse model of non-alcoholic fatty liver disease (NAFLD).^{1,2} Tauro- ω -muricholic acid is the predominant rare bile acid found in the serum of infants with early-onset neonatal sepsis.³

References

1. Zhang, Y. and Klaassen, C.D. Effects of feeding bile acids and a bile acid sequestrant on hepatic bile acid composition in mice. *J. Lipid Res.* **51(11)**, 3230-3242 (2010).
2. Tang, Y., Zhang, J., Li, J., et al. Turnover of bile acids in liver, serum and caecal content by high-fat diet feeding affects hepatic steatosis in rats. *Biochim. Biophys. Acta. Mol. Cell Biol. Lipids* **1864(10)**, 1293-1304 (2019).
3. Zöhrer, E., Meinel, K., Fauler, G., et al. Neonatal sepsis leads to early rise of rare serum bile acid tauro-omega-muricholic acid (TOMCA). *Pediatr. Res.* **84(1)**, 66-70 (2018).

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, 03/08/2023

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