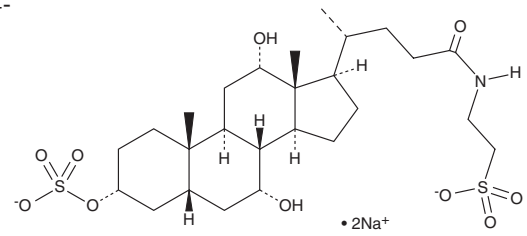
PRODUCT INFORMATION

Taurocholic Acid 3-sulfate (sodium salt)

Item No. 9002538

CAS Registry No.: 71781-33-4
Formal Name: 2-[[(3α,5β,7α,12α)-7,12-dihydroxy-24-oxo-3-(sulfooxy)cholan-24-yl]amino]-ethanesulfonic acid, disodium salt
Synonyms: 3-Sulfocholyl Taurine, TCA3S
MF: $C_{26}H_{43}NO_{10}S_2 \bullet 2Na$
FW: 639.7
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Taurocholic acid 3-sulfate (TCA3S) (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the TCA3S (sodium salt) in the solvent of choice, which should be purged with an inert gas. TCA3S (sodium salt) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of TCA3S (sodium salt) in these solvents is approximately 0.3 and 1 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of TCA3S (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of TCA3S (sodium salt) in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

TCA3S is a metabolite of the conjugated bile acid taurocholic acid (Item No. 16215).[1] Plasma levels of TCA3S are elevated in wild-type and *Sortilin 1* (*Sort1*) knockout mice at 6 hours following bile duct ligation (BDL) and are further elevated in *Sort1* knockout mice at 24 hours post-BDL.[2]

References

1. Lefebvre, P., Cariou, B., Lien, F., *et al.* Role of bile acids and bile acid receptors in metabolic regulation. *Physiol. Rev.* **89(1)**, 147-191 (2009).
2. Li, J., Woolbright, B.L., Zhao, W., *et al.* Sortilin 1 loss-of-function protects against cholestatic liver injury by attenuating hepatic bile acid accumulation in bile duct ligated mice. *Toxicol. Sci.* **161(1)**, 34-47 (2018).

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