PRODUCT INFORMATION



Glycolithocholic Acid 3-sulfate (sodium salt)

Item No. 35298

CAS Registry No.: 64936-82-9

Formal Name: $N-[(3\alpha,5\beta)-24-oxo-3-(sulfooxy)]$

cholan-24-yl]-glycine, disodium salt

Synonyms: GLCA 3-sulfate,

> Lithocholylglycine 3-sulfate, 3-Sulfoglycolithocholic Acid, Sulfolithocholylglycine

 $C_{26}H_{41}NO_7S \bullet 2Na$ MF:

FW: 557.7 **Purity:** ≥95% Supplied as: A solid -20°C Storage: Stability: ≥4 years • 2Na+

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

Laboratory Procedures

Glycolithocholic acid 3-sulfate (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the glycolithocholic acid 3-sulfate (sodium salt) in the solvent of choice, which should be purged with an inert gas. Glycolithocholic acid 3-sulfate (sodium salt) is slightly soluble in methanol.

Glycolithocholic acid 3-sulfate (sodium salt) is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Glycolithocholic acid 3-sulfate is a metabolite of glycolithocholic acid (Item Nos. 21723 | 20273). It is formed from glycolithocholic acid by hepatocytes.² Glycolithocholic acid 3-sulfate (240 μmol/kg) induces cholestasis and increases biliary cholesterol secretion in rats.³ Serum glycolithocholic acid 3-sulfate levels are increased in patients with cirrhosis, hepatitis, or cholestasis.⁴

References

- 1. Palmer, R.H. The formation of bile acid sulfates: A new pathway of bile acid metabolism in humans. Proc. Natl. Acad. Sci. USA 58(3), 1047-1050 (1967).
- 2. Kirkpatrick, R.B. and Belsaas, R.A. Formation and secretion of glycolithocholate-3-sulfate in primary hepatocyte cultures. J. Lipid Res. 26(12), 1431-1437 (1985).
- Yousef, I.M., Tuchweber, B., Vonk, R.J., et al. Lithocholate cholestasis-sulfated glycolithocholate-induced intrahepatic cholestasis in rats. Gastroenterology 80(2), 233-241 (1981).
- Demers, L.M. and Hepner, G.W. Levels of immunoreactive glycine-conjugated bile acids in health and hepatobiliary disease. Am. J. Clin. Pathol. 66(5), 831-839 (1976).

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.

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