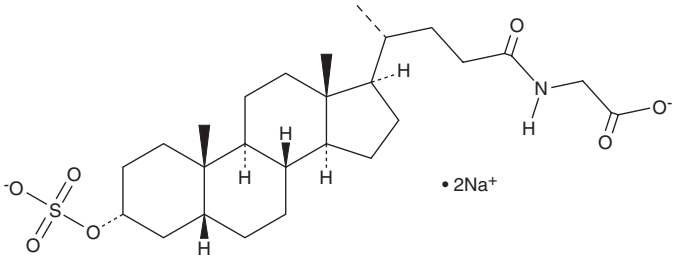
PRODUCT INFORMATION

Glycolithocholic Acid 3-sulfate (sodium salt)

Item No. 35298

CAS Registry No.: 64936-82-9
Formal Name: N-[(3α,5β)-24-oxo-3-(sulfooxy) cholan-24-yl]-glycine, disodium salt
Synonyms: GLCA 3-sulfate, Lithocholylglycine 3-sulfate, 3-Sulfoglycolithocholic Acid, Sulfolithocholylglycine
MF: $C_{26}H_{41}NO_7S \bullet 2Na$
FW: 557.7
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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).[1] 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).
3. 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).
4. 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).

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