

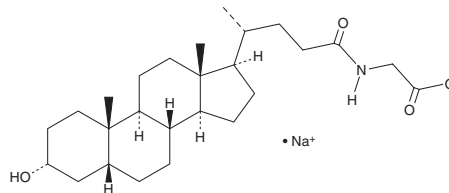
PRODUCT INFORMATION



Glycolithocholic Acid (sodium salt)

Item No. 20273

CAS Registry No.: 24404-83-9
Formal Name: N-[(3 α ,5 β)-3-hydroxy-24-oxocholan-24-yl]-glycine, monosodium salt
Synonym: Lithocholylglycine
MF: C₂₆H₄₂NO₄ • Na
FW: 455.6
Purity: ≥95%
Supplied as: A crystalline 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 (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the glycolithocholic acid (sodium salt) in the solvent of choice, which should be purged with an inert gas. Glycolithocholic acid (sodium salt) is soluble in organic solvents such as ethanol and DMSO. The solubility of glycolithocholic acid (sodium salt) in these solvents is approximately 12 and 20 mg/ml, respectively.

Glycolithocholic acid (sodium salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, glycolithocholic acid (sodium salt) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Glycolithocholic 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

Glycolithocholic acid is a glycine-conjugated form of the secondary bile acid lithocholic acid (Item No. 20253).¹ It is increased in the liver of mice fed a diet supplemented with ursodeoxycholic acid (Item No. 15121).² Glycolithocholic acid levels are decreased in the plasma following subcutaneous administration of PEG-obestatin(Cys10, Cys13), a modified peptide hormone, in lean or diet-induced obese mice.³ Serum glycolithocholic acid levels increase with age in children.⁴

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. 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).
3. Cowan, E., Kimar, P., Burch, K.J., *et al.* Treatment of lean and diet-induced obesity (DIO) mice with a novel stable obestatin analogue alters plasma metabolite levels as detected by untargeted LC-MS metabolomics. *Metabolomics* **12**(124), (2016).
4. Semba, R.D., Gonzalez-Freier, M., Moaddel, R., *et al.* Environmental enteric dysfunction is associated with altered bile acid metabolism. *J. Pediatr. Gastroenterol. Nutr.* **64**(4), 536-540 (2017).

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.

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