

Product Data Sheet

Product Name: N-butyl Lithocholic Acid

Cat. No.: GC92013

Chemical Properties

Cas. No. 135013-42-2

Chemical Name (3 α ,5 β)-3-hydroxy-cholan-24-oic acid, butyl ester

SMILES CCCC(=O)O[C@H]1CC[C@@H]2[C@H](CC[C@H]3[C@H]1CC[C@@H](O)CC[C@H]3C)CC[C@H]2C

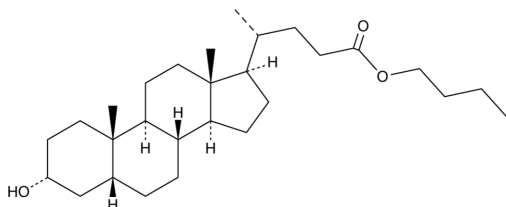
Formula C₂₈H₄₈O₃ M.Wt 432.7

Solubility DMSO: Slightly soluble: 0.1-1 mg/ml, Ethanol: Sparingly soluble: 1-10 mg/ml Storage -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

N-butyl Lithocholic acid is a derivative of the secondary bile acid lithocholic acid.¹ Lipid nanoparticles (LNPs) containing N-butyl lithocholic acid and encapsulating an mRNA vaccine expressing influenza hemagglutinin exhibit less heart, spleen, and liver toxicity than LNPs containing cholesterol in mice.

References:

[1]. Bae, S.-H., Yoo, S., Lee, J., et al. A lipid nanoparticle platform incorporating trehalose glycolipid for exceptional mRNA vaccine safety. *Bioact. Mater.* 38486-498(2024).

Caution: Product has not been fully validated for medical applications. For research use only.

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