

PRODUCT INFORMATION



N-butyl Lithocholic Acid

Item No. 41397

CAS Registry No.: 135013-42-2

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

Synonyms: N-butyl LCA, N-butyl Lithocholate

MF: C₂₈H₄₈O₃

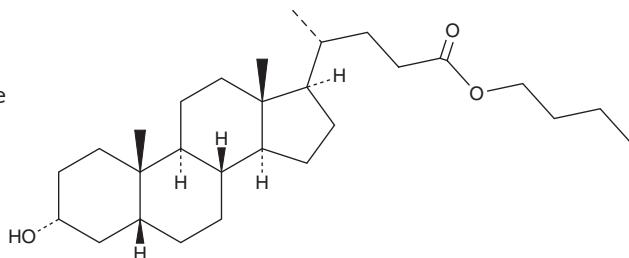
FW: 432.7

Purity: \geq 98%

Supplied as: A solid

Storage: -20°C

Stability: \geq 2 years



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

Laboratory Procedures

N-butyl Lithocholic acid is supplied as a solid. A stock solution may be made by dissolving the N-butyl lithocholic acid in the solvent of choice, which should be purged with an inert gas. N-butyl Lithocholic acid is sparingly soluble (1-10 mg/ml) in ethanol and slightly soluble (0.1-1 mg/ml) in DMSO.

Description

N-butyl Lithocholic acid is a derivative of the secondary bile acid lithocholic acid (Item No. 20253).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 (Item Nos. 9003100 | 39088) in mice.

Reference

1. Bae, S.-H., Yoo, S., Lee, J., et al. A lipid nanoparticle platform incorporating trehalose glycolipid for exceptional mRNA vaccine safety. *Bioact. Mater.* **38**, 486-498 (2024).

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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