

PRODUCT INFORMATION



Lauroyl-L-carnitine-12,12,12-d₃ (chloride)

Item No. 26769

Formal Name: (R)-3-carboxy-2-((dodecanoyl-12,12,12-d₃)oxy)-N,N,N-trimethylpropan-1-aminium, monochloride

Synonyms: CAR 12:0-d₃, C12:0 Carnitine-d₃, L-Carnitine lauroyl ester-d₃, L-Lauroylcarnitine-d₃

MF: C₁₉H₃₅D₃NO₄ • Cl

FW: 383.0

Chemical Purity: ≥95% (Lauroyl-L-carnitine)

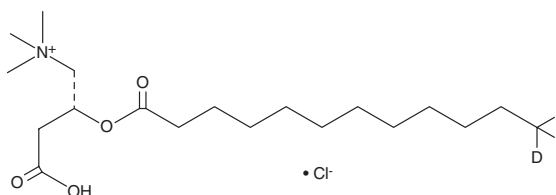
Deuterium

Incorporation: ≥99% deuterated forms (d₁-d₃); ≤1% d₀

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

Lauroyl-L-carnitine-12,12,12-d₃ (chloride) is intended for use as an internal standard for the quantification of lauroyl-L-carnitine (Item No. 26550) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Lauroyl-L-carnitine-12,12,12-d₃ (chloride) is supplied as a solid. A stock solution may be made by dissolving the lauroyl-L-carnitine-12,12,12-d₃ (chloride) in the solvent of choice, which should be purged with an inert gas. Lauroyl-L-carnitine-12,12,12-d₃ (chloride) is slightly soluble in methanol.

Description

Lauroyl-L-carnitine is an acylcarnitine and a quaternary ammonium-containing cationic surfactant.¹ It has been used to permeabilize porcine enterocytes for delivery of the polar fluorescent probe lucifer yellow (Item No. 25573).

Reference

1. Danielsen, E.M. and Hansen, G.H. Intestinal surfactant permeation enhancers and their interaction with enterocyte cell membranes in a mucosal explant system. *Tissue Barriers* **5**(3), e1361900 (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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