

PRODUCT INFORMATION



Decanoyl-L-carnitine-d₃ (chloride)

Item No. 26568

CAS Registry No.: 2483831-87-2
Formal Name: (2R)-3-carboxy-N,N-dimethyl-N-(methyl-d₃)-2-[(1-oxodecyl)oxy]-1-propanaminium, monochloride
Synonyms: CAR 10:0-d₃, C10:0 Carnitine-d₃, (-)-Decanoylcarnitine-d₃, L-Carnitine decanoyl ester-d₃, L-Decanoylcarnitine-d₃

MF: C₁₇H₃₁D₃NO₄ • Cl
FW: 354.9

Chemical Purity: ≥98% (Decanoyl-L-carnitine)

Deuterium

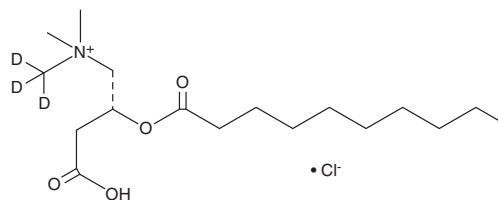
Incorporation: ≥99% deuterated forms (d₁-d₃); ≤1% d₀

Supplied as: A solid

Storage: -20°C

Stability: ≥2 years

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



Laboratory Procedures

Decanoyl-L-carnitine-d₃ (chloride) is intended for use as an internal standard for the quantification of decanoyl-L-carnitine (Item No. 26549) 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).

Decanoyl-L-carnitine-d₃ (chloride) is supplied as a solid. A stock solution may be made by dissolving the decanoyl-L-carnitine-d₃ (chloride) in the solvent of choice, which should be purged with an inert gas. Decanoyl-L-carnitine-d₃ (chloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of decanoyl-L-carnitine-d₃ (chloride) in ethanol and DMF is approximately 20 mg/ml and approximately 10 mg/ml in DMSO.

Description

Decanoyl-L-carnitine increases the formation of C24 fatty acid intermediates, as well as docosapentaenoic and docosahexaenoic acid (Item No. 90310), in rat hepatocytes.¹

Reference

1. Tran, T.N., Retterstøl, K., and Christophersen, B.O. Differences in the conversion of the polyunsaturated fatty acids [1-¹⁴C]22:4(n-6) and [1-¹⁴C]22:5(n-3) to [1-¹⁴C]22:5(n-6) and [1-¹⁴C]22:6(n-3) in isolated rat hepatocytes. *Biochim Biophys. Acta.* **1532**(1-2), 137-147 (2001).

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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