

PRODUCT INFORMATION

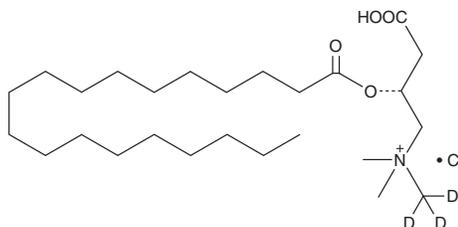


Nonadecanoyl-L-carnitine-d₃ (chloride)

Item No. 9003264

Formal Name: (R)-3-carboxy-N,N-dimethyl-N-(methyl-d₃)-2-(nonadecanoyloxy)propan-1-aminium, monochloride

Synonyms: CAR 19:0-d₃, C19:0 Carnitine-d₃, L-Carnitine nonadecanoyl ester-d₃, L-Carnitine pristanoyl ester-d₃, L-Nonadecanoylcarnitine-d₃, Pristanoylcarnitine-d₃,



MF: C₂₆H₄₉D₃NO₄ • Cl
FW: 481.2

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

Deuterium

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

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

Nonadecanoyl-L-carnitine-d₃ (chloride) is intended for use as an internal standard for the quantification of nonadecanoyl-L-carnitine 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).

Nonadecanoyl-L-carnitine-d₃ (chloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the nonadecanoyl-L-carnitine-d₃ (chloride) in the solvent of choice, which should be purged with an inert gas. Nonadecanoyl-L-carnitine-d₃ (chloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of nonadecanoyl-L-carnitine-d₃ (chloride) in these solvents is approximately 10, 14, and 20 mg/ml, respectively.

Description

Nonadecanoyl-L-carnitine is a long-chain acylcarnitine composed of nonadecanoic acid (Item No. 19723) and L-carnitine (Item No. 21489). Serum levels of nonadecanoyl-L-carnitine are decreased in children and adolescents chronically exposed to industrial carcinogenic pollutants.¹

Reference

1. Chen, C.-H.S., Kuo, T.-C., Kuo, H.-C., *et al.* Metabolomics of children and adolescents exposed to industrial carcinogenic pollutants. *Environ. Sci. Technol.* **53**(9), 5454-5465 (2019).

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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