

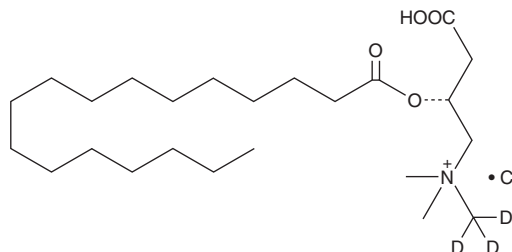
PRODUCT INFORMATION



Heptadecanoyl-L-carnitine-d₃ (chloride)

Item No. 9003263

Formal Name:	(R)-3-carboxy-2-(heptadecanoyloxy)-N,N-dimethyl-N-(methyl-d ₃)propan-1-aminium, monochloride
Synonyms:	CAR 17:0-d ₃ , C17:0 Carnitine-d ₃ , L-Carnitine heptadecanoyl ester-d ₃ , L-Heptadecanoylcarnitine-d ₃
MF:	C ₂₄ H ₄₅ D ₃ NO ₄ • Cl
FW:	453.1
Chemical Purity:	≥95% (Heptadecanoyl-L-carnitine)
Deuterium Incorporation:	≥99% deuterated forms (d ₁ -d ₃); ≤1% d ₀
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

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

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

Description

Heptadecanoyl-L-carnitine is a long-chain acylcarnitine composed of heptadecanoic acid (Item No. 19722) and L-carnitine (Item No. 21489). Levels of heptadecanoyl-L-carnitine are increased in dried blood spots from neonates with propionic or methylmalonic acidemias, inborn errors of metabolism characterized by a deficiency in the activity of propionyl-CoA carboxylase or L-methylmalonyl-CoA mutase or its cofactor 5-deoxyadenosylcobalamin, respectively.¹

Reference

1. Malvagia, S., Haynes, C.A., Grisotto, L., *et al.* Heptadecanoylcarnitine (C17) a novel candidate biomarker for propionic and methylmalonic acidemias during expanded newborn screening. *Clin. Chim. Acta* **450**, 342-348 (2015).

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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