

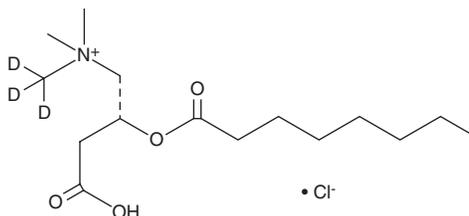
PRODUCT INFORMATION



Octanoyl-L-carnitine-d₃ (chloride)

Item No. 26577

CAS Registry No.: 1334532-24-9
Formal Name: (2R)-3-carboxy-N,N-dimethyl-N-(methyl-d₃)-2-[[1-oxooctyl]oxy]-1-propanaminium, monochloride
Synonyms: CAR 8:0-d₃, C8:0 Carnitine-d₃, L-Carnitine octanoyl ester-d₃, L-Octanoylcarnitine-d₃,
MF: C₁₅H₂₇D₃NO₄ • Cl
FW: 326.9
Chemical Purity: ≥98% (Octanoyl-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

Octanoyl-L-carnitine-d₃ is intended for use as an internal standard for the quantification of octanoyl-L-carnitine (Item No. 26558) 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).

Octanoyl-L-carnitine-d₃ (chloride) is supplied as a solid. A stock solution may be made by dissolving the octanoyl-L-carnitine-d₃ (chloride) in the solvent of choice. Octanoyl-L-carnitine-d₃ (chloride) is soluble in the organic solvent DMSO, which should be purged with an inert gas.

Description

Octanoyl-L-carnitine is a medium-chain acylcarnitine and the physiologically active form of octanoyl-DL-carnitine (Item No. 15048).¹ Plasma levels of octanoyl-L-carnitine are elevated in patients with end-stage renal disease on continuous ambulatory peritoneal dialysis (PD) compared with both patients on automated PD and healthy individuals.² Octanoyl-L-carnitine does not undergo hydrolysis in the blood or during sample preparation when used as a standard for the quantification of octanoylcarnitine.¹

References

1. Chace, D.H., DiPerna, J.C., Adam, B.W., *et al.* Errors caused by the use of _{D,L}-octanoylcarnitine for blood-spot calibrators. *Clin. Chem.* **47(4)**, 758-760 (2001).
2. Di Liberato, L., Arduini, A., Rossi, C., *et al.* L-Carnitine status in end-stage renal disease patients on automated peritoneal dialysis. *J. Nephrol.* **27(6)**, 699-706 (2014).

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.

WARRANTY AND LIMITATION OF REMEDY

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