

## **Lumiprobe Corporation**

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## (C16) Hexadecanoyl-L-carnitine-d3

http://www.lumiprobe.com/p/hexadecanoyl-l-carnitine-d3

(C16) Hexadecanoyl-L-carnitine d3 is a deuterated ester of L-carnitine and palmitic acid, intended for use as an internal standard for the quantification of palmitoyl-L-carnitine by GC- or LC-MS.

Also hexadecanoyl-L-carnitine d3(C16) can be used to determine hexadecenoylcarnitine(C16:1), 3-hydroxyhexadecanoylcarnitine (C16OH). These biochemical markers can be used for diagnosis in metabolic diseases: carnitine palmitoyltransferase deficiency type I, type II, carnitine-acylcarnitine translocase (CACT) deficiency. As an auxiliary marker: long-chain 3-hydroxyacyl-CoA dehydrogenase (LCHAD) deficiency, in deficiency of mitochondrial trifunctional protein, propionic and methylmalonic aciduria.

## Structure of Hexadecanoyl-L-carnitine-d3

## **General properties**

Appearance: white solid Molecular weight: 439.09

CAS number: 1334532-26-1 Molecular formula:  $C_{23}H_{43}D_3CINO_4$ 

Solubility: DMF, DMSO, ethanol

Quality control: NMR <sup>1</sup>H and HPLC-MS (95+ %, D: 98+ %)

Storage conditions: 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks.

Desiccate.

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efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic

products.