

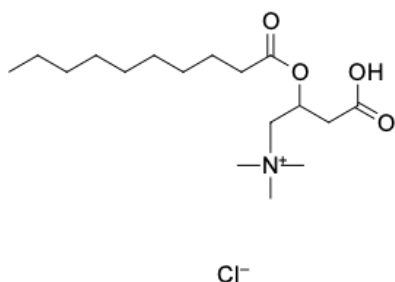
(C10) Decanoylcarnitine

<http://www.lumiprobe.com/p/decanoylcarnitine-3992-45-8>

Decanoylcarnitine is a decanoic acid ester of carnitine. Decanoylcarnitine is a medium-chain acylcarnitine that may facilitate the transport of long-chain fatty acids into the mitochondria where fatty acids undergo β -oxidation. Decanoylcarnitine is used as an analytical reference standard using GC- or LC-MS methods.

Decanoylcarnitine serves as a specific diagnostic biomarker for metabolites found in medium-chain acyl-CoA dehydrogenase (MCAD) deficiency, especially in neonates, glutaric acidemia type II, celiac disease, and adolescent obesity. Secondary marker of medium-chain ketoacyl-CoA thiolase deficiency.

The product is used primarily as a control for MS/MS.



Structure of (C10) Decanoyl-L-carnitine

General properties

- | | |
|---------------------|--|
| Appearance: | white solid |
| Molecular weight: | 351.91 |
| CAS number: | 3992-45-8 |
| Molecular formula: | C ₁₇ H ₃₄ ClNO ₄ |
| Solubility: | DMSO |
| Quality control: | NMR ¹ H and HPLC-MS (95+%) |
| Storage conditions: | 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. |
| Legal statement: | This Product is offered and sold for research purposes only. It has not been tested for safety and 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. |