

Certificate of Analysis

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Product Name: (±)-Myristoylcarnitine chloride

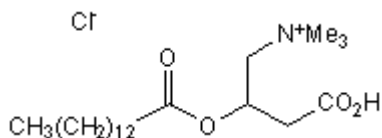
Catalog No.: 0567

Batch No.: 2

CAS Number: 14919-38-1

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₄₂ClNO₄
Batch Molecular Weight: 408.02
Physical Appearance: White solid
Solubility: water to 25 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.65 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])
Melting Point: At 158°C
HPLC: Shows 97.4% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	61.82	10.38	3.43
Found	62.02	10.51	3.56

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Information

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Product Name: (±)-Myristoylcarnitine chloride

Catalog No.: 0567

Batch No.: 2

CAS Number: 14919-38-1

Description:

Homolog of acetylcarnitine chloride (Cat. No. 0355).
Acylcarnitines are important intermediates in lipid metabolism.

Physical and Chemical Properties:

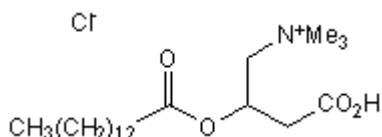
Batch Molecular Formula: C₂₁H₄₂ClNO₄

Batch Molecular Weight: 408.02

Physical Appearance: White solid

Minimum Purity: >97%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

water to 25 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Chalmers et al (1984) Urinary excretion of *L*-carnitine and acylcarnitines by patients with disorders of organic acid metabolism: evidence for secondary insufficiency of *L*-carnitine. *Pediatr.Res.* **18** 1325. PMID: 6441143.

Coates and Tanaka (1992) Molecular basis of mitochondrial fatty acid oxidation defects. *J.Lipid.Res.* **33** 1099. PMID: 1431593.

Poorthuis et al (1993) Determination of acylcarnitines in urine of patients with inborn errors of metabolism using HPLC after derivatization with 4'-bromophenacyl bromide. *Clin.Chim.Acta* **216** 53. PMID: 8222273.

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