

Certificate of Analysis

Print Date: Jun 9th 2025

www.tocris.com

Product Name: (±)-Octanoylcarnitine chloride Catalog No.: 0605 Batch No.: 3

14919-35-8 CAS Number:

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{30}CINO_4$

Batch Molecular Weight: 323.86

White solid **Physical Appearance:**

Solubility: water to 100 mM

DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical 55.63 9.34 4.33 Found 54.87 9.49 4.24

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

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Product Information

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Batch No.: 3

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Product Name: (±)-Octanoylcarnitine chloride

CAS Number: 14919-35-8

Description:

(±)-Octanoylcarnitine chloride is a homolog of acetylcarnitine chloride (Cat. No. 0355). Acylcarnitines are important intermediates in lipid metabolism.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₅H₃₀CINO₄ Batch Molecular Weight: 323.86 Physical Appearance: White solid

Batch Molecular Structure:

Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM DMSO to 100 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).

Catalog No.: 0605

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

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.

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

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