TOCRIS bioscience

Print Date: Dec 14th 2011

Certificate of Analysis

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Product Name: (±)-Octanoylcarnitine chloride **Catalog No.: 0605** **Batch No.: 2**

CAS Number: 18822-86-1

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{30}ClNO_4$

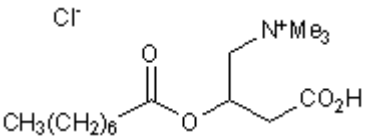
Batch Molecular Weight: 323.86

Physical Appearance: White solid

Solubility: water to 100 mM
DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 100% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	55.63	9.34	4.32
Found	55.52	9.45	4.34

Product Name: (±)-Octanoylcarnitine chloride **Catalog No.: 0605** **Batch No.: 2**

CAS Number: 18822-86-1

Description:

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

Physical and Chemical Properties:

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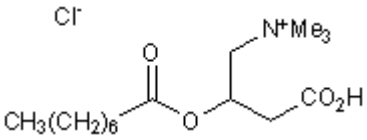
Batch Molecular Weight: 323.86

Physical Appearance: White solid

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Useage 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).

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.