



Certificate of Analysis

www.tocris.com

Product Name: (±)-Palmitoylcarnitine chloride Catalog No.: 0609 Batch No.: 1

CAS Number: 6865-14-1

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{23}H_{46}CINO_4$

Batch Molecular Weight: 436.05
Physical Appearance: White solid
Solubility: water to 25 mM
Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.55$ (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

Melting Point:

Between 186 - 188°C

Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.35 10.63 3.21 Found 62.98 10.59 3.19



Product Information

Print Date: Jan 15th 2016 **WWW.tocris.com**

Product Name: (±)-Palmitoylcarnitine chloride Catalog No.: 0609 Batch No.: 1

CAS Number: 6865-14-1

Description:

Intermediate in mitochondrial fatty acid oxidation. Has a wide range of biological actions including the inhibition of protein kinase C and cell membrane disruption.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₃H₄₆CINO₄ Batch Molecular Weight: 436.05 Physical Appearance: White solid

Batch Molecular Structure:

Storage: Desiccate at RT

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:

Nakadate and Blumberg (1987) Modulation by palmitoylcarnitine of protein kinase C activation. Cancer Res. **47** 6537. PMID: 3479247. **Criddle** *et al* (1990) The effects of novel vasodilator long chain acyl carnitine esters in the isolated perfused heart of the rat. Br.J.Pharmacol. **99** 477. PMID: 1691947.

Dainty et al (1990) Interactions of palmitoyl carnitine with the endothelium in rat aorta. Br.J.Pharmacol. 100 241. PMID: 1696151.

Requero et al (1995) The membrane-perturbing properties of palmitoyl-coenzyme A and palmitoylcarnitine. A comparative study. Biochemistry 34 10400. PMID: 7654694.