



Certificate of Analysis

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Product Name: (R)-(+)-Etomoxir sodium salt Catalog No.: 4539 Batch No.: 3

CAS Number: 828934-41-4

IUPAC Name: (R)-(+)-2-[6-(4-Chlorophenoxy)hexyl]-oxirane-2-carboxylic acid sodium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{18}CINaO_4.H_2O$

Batch Molecular Weight: 338.76

Physical Appearance: White solid

Solubility: water to 20 mM

DMSO to 20 mM with gentle warming

ethanol to 20 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

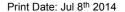
Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D = +22.4$ (Concentration = 1, Solvent = Methanol)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 53.19 5.95 Found 53.24 5.66







Product Information

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Description:

Inhibitor of carnitine palmitoyltransferase I (CPT1); inhibits β -oxidation in mitochondria. Shown to inhibit cardiolipin biosynthesis from exogenous fatty acid in H9c2 cells.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₅H₁₈ClNaO₄.H₂O

Batch Molecular Weight: 338.76 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

water to 20 mM

DMSO to 20 mM with gentle warming

ethanol to 20 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:

Agius *et al* (1991) Stereospecificity of the inhibition of etomoxir of fatty acid and cholesterol synthesis in isolated rat hepatocytes. Biochem.Pharmacol. **42** 1717. PMID: 1930298.

Rupp *et al* (1992) Modification of subcellular organelles in pressure-overloaded heart by etomoxir, a carnitine palmitoyltransferase I inhibitor. FASEB J. *6* 2349. PMID: 1531968.

Xu et al (2003) Etomoxir mediates differential metabolic channeling of fatty acid and glycerol precursors into cardiolipin in H9c2 cells. J.Lipid Res. **44** 415. PMID: 12576524.

