

Certificate of Analysis

www.tocris.com

Product Name: C 75

Catalog No.: 2489

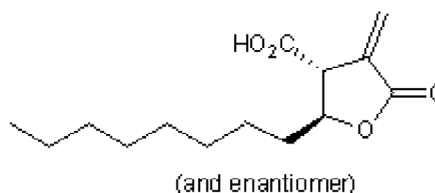
Batch No.: 3

CAS Number: 191282-48-1

IUPAC Name: (2*R**,3*S**)-Tetrahydro-4-methylene-2-octyl-5-oxo-3-furancarboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₄H₂₂O₄
Batch Molecular Weight: 254.32
Physical Appearance: White solid
Solubility: 1eq. NaOH to 100 mM
DMSO to 100 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.06 (Ethyl acetate:Petroleum ether [4:1])
HPLC: Shows 94.8% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	66.12	8.72	
Found	66.21	8.91	0.05

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

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel: +1 612 379 2956

Product Name: C 75

Catalog No.: 2489

Batch No.: 3

CAS Number: 191282-48-1

IUPAC Name: (2*R**,3*S**)-Tetrahydro-4-methylene-2-octyl-5-oxo-3-furancarboxylic acid

Description:

C 75 is a synthetic inhibitor of fatty acid synthase (FASN); inhibits fatty acid synthesis in vitro and in vivo. Displays anorectic effects. Induces apoptosis in MCF-7 xenografts and exhibits antitumor activity.

Physical and Chemical Properties:

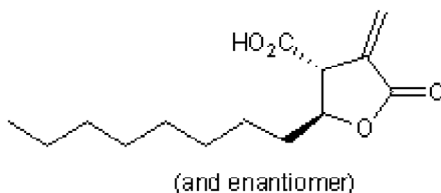
Batch Molecular Formula: C₁₄H₂₂O₄

Batch Molecular Weight: 254.32

Physical Appearance: White solid

Minimum Purity: ≥94%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

1eq. NaOH 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. *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:

Takahashi *et al* (2004) The anorexigenic fatty acid synthase inhibitor, C45, is a nonspecific neuronal activator. *Endocrinology* **145** 184. PMID: 14512433.

Thupari *et al* (2004) Chronic C75 treatment of diet-induced obese mice increases fat oxidation and reduces food intake to reduce adipose mass. *Am.J.Physiol.Endocrinol.Metab.* **287** 97.

Zhou *et al* (2003) Fatty acid synthase inhibition triggers apoptosis during S phase in human cancer cells. *Cancer Res.* **63** 7330. PMID: 14612531.

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956