

Certificate of Analysis

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Product Name: CI 976

Catalog No.: 2227

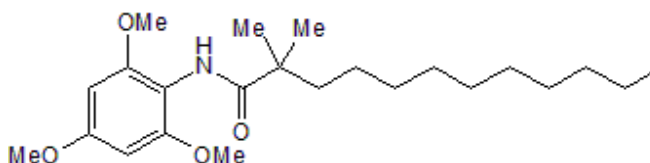
Batch No.: 1

CAS Number: 114289-47-3

IUPAC Name: 2,2-Dimethyl-*N*-(2,4,6-trimethoxyphenyl)dodecanamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₃H₃₉NO₄
Batch Molecular Weight: 393.57
Physical Appearance: White solid
Solubility: ethanol to 50 mM
 DMSO to 100 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.2 (Ethyl acetate:Petroleum ether [3:7])
HPLC: Shows 99.1% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	70.19	9.99	3.56
Found	70.11	9.88	3.49

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

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IUPAC Name: 2,2-Dimethyl-N-(2,4,6-trimethoxyphenyl)dodecanamide

Description:

Selective acyl-coenzyme A:cholesterol acyltransferase (ACAT) inhibitor ($IC_{50} = 0.073 \mu M$). Lowers non-high density lipoprotein (HDL)-cholesterol and increases HDL-cholesterol concentrations in rats with pre-established dyslipidemia. Orally active. Also inhibits Golgi-associated LPL acyltransferase (LPAT) activity ($IC_{50} = 15 \mu M$).

Physical and Chemical Properties:

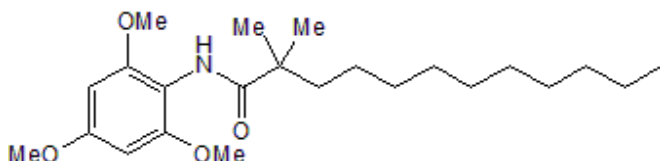
Batch Molecular Formula: $C_{23}H_{39}NO_4$

Batch Molecular Weight: 393.57

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

ethanol to 50 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:

Drecktrah et al (2003) Inhibition of a Golgi complex lysophospholipid acyltransferase induces membrane tubule formation and retrograde trafficking. *Mol.Biol.Cell* **14** 3549.

Krause et al (1993) In vivo evidence that the lipid-regulating activity of ACAT inhibitor CI-976 in rats is due to inhibition of both intestinal and liver ACAT. *J.Lipid Res.* **34** 279. PMID: 8429262.

Sliskovic and White (1991) Therapeutic potential of ACAT inhibitors as lipid lowering and anti-atherosclerotic agents. *TIPS.* **12** 194.

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