

Product Name: Rosuvastatin calcium

Catalog No.: 6343

Batch No.: 1

CAS Number: 147098-20-2

IUPAC Name: (3*R*,5*S*,6*E*)-7-[4-(4-Fluorophenyl)-6-isopropyl-2-[methyl(methylsulfonyl)amino]pyrimidin-5-yl]-3,5-dihydroxyhept-6-enoic acid hemicalcium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₂H₂₇FN₃O₆S.½Ca.H₂O

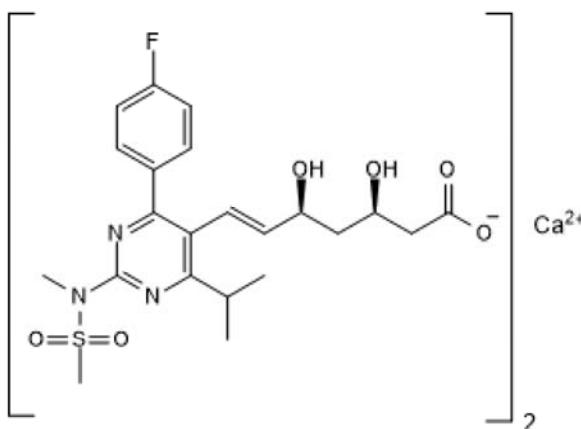
Batch Molecular Weight: 518.59

Physical Appearance: White solid

Solubility: DMSO to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.1% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: [α]_D = +15.6 (Concentration = 1, Solvent = 50% MeOH/Water)

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	50.95	5.64	8.1
Found	50.73	5.58	7.93

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Description:

Rosuvastatin calcium is a potent HMG-CoA reductase inhibitor ($IC_{50} = 5.4$ nM). Inhibits cholesterol synthesis in rat hepatocytes in vitro and in vivo. Reduces plasma LDL cholesterol levels. Enhances lentiviral transduction of natural killer cells. Orally bioavailable.

Physical and Chemical Properties:

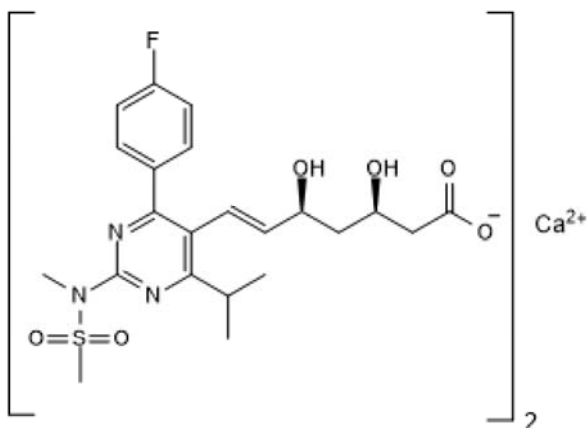
Batch Molecular Formula: $C_{22}H_{27}FN_3O_6S \cdot \frac{1}{2}Ca \cdot H_2O$

Batch Molecular Weight: 518.59

Physical Appearance: White solid

Minimum Purity: $\geq 99\%$

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

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:

Gong et al (2020) Rosuvastatin enhances VSV-G lentiviral transduction of NK cells via upregulation of the low-density lipoprotein receptor. *Mol. Ther. Methods Clin. Dev.* **17** 634. PMID: 32300610.

McTaggart et al (2001) Preclinical and clinical pharmacology of Rosuvastatin, a new 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitor. *Am.J.Cardiol.* **87** 28B. PMID: 11256847.

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