

**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:** C<sub>22</sub>H<sub>27</sub>FN<sub>3</sub>O<sub>6</sub>S.½Ca.H<sub>2</sub>O

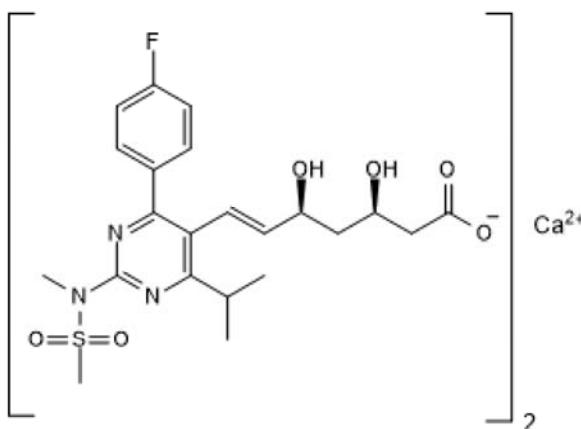
**Batch Molecular Weight:** 518.59

**Physical Appearance:** White solid

**Solubility:** DMSO to 100 mM

**Storage:** Store at +4°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.3% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Optical Rotation:** [α]<sub>D</sub> = +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     |

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

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**Description:**

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:**

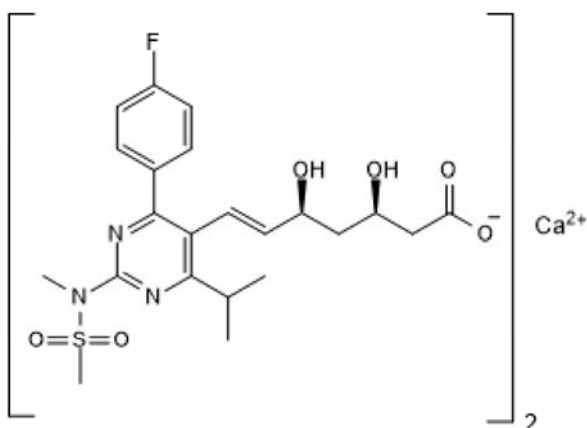
Batch Molecular Formula:  $C_{22}H_{27}FN_3O_6S \cdot \frac{1}{2}Ca \cdot H_2O$

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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**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