



# LKT Laboratories, Inc.

## Rosuvastatin Calcium

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### Product Information

**Product ID** R5974

**CAS No.** 147098-20-2

**Chemical Name** (S-((R\*,S\*-(E))- 7-(4-(4-fluorophenyl)-6-(1-methylethyl)-2-(methyl(methylsulfonyl) amino)-5-pyrimidinyl)-3,5-dihydroxy-6-heptenoic acid, calcium salt (2:1)

**Synonym**

**Formula**  $2C_{27}H_{30}FN_2O_6S \text{ Ca}^{2+}$

**Formula Wt.** 1001.14

**Melting Point** 156-160°C dec° mp

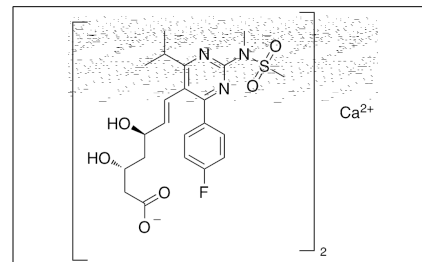
**Purity** ≥98%

**Solubility** Slightly soluble in water, marginally soluble in ethanol, soluble in DMSO(100mg/mL), DMF

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Rosuvastatin is an inhibitor of HMG-CoA reductase that decreases serum LDL and VLDL and is used to treat atherosclerosis in clinical settings. In addition to anti-atherosclerotic benefit, rosuvastatin also exhibits anti-inflammatory, cardioprotective, and anti-platelet activities. In animal models, rosuvastatin decreases levels of plasma lipids and angiotensin II (ATII) by inhibiting expression of the angiotensin II type 1 (AT1) receptor and p-ERK1/2 and upregulating scavenger receptor B1. Separately, rosuvastatin downregulates ERK, p38MAPK, matrix metalloproteinases 2 and 9 (MMP2/9), and PAI expression, inhibiting migration and proliferation of vascular smooth muscle cells. This compound also downregulates expression of the nucleotide-binding oligomerization domain-like receptor protein 3 (NLRP3) inflammasome, inhibiting cardiac remodeling and dysfunction in animal models of diabetic cardiomyopathy. Additionally, rosuvastatin inhibits activation of NADPH oxidase and PKC, decreasing platelet recruitment and activation in vitro and ex vivo.



### Pricing and Availability

**Bulk quantities available upon request**

Product ID	Size	List Price
R5974	25 mg	\$169.10
R5974	100 mg	\$563.60
R5974	250 mg	\$1070.70

**References** Li Y, Wang Q, Zhou J, et al. Rosuvastatin attenuates atherosclerosis in rats via activation of scavenger receptor class B type I. *Eur J Pharmacol.* 2013 Dec 10;723C:23-28. [Epub ahead of print]. PMID: 24333476.

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Pignatelli P, Carnevale R, Di Santo S, et al. Rosuvastatin reduces platelet recruitment by inhibiting NADPH oxidase activation. *Biochem Pharmacol.* 2012 Dec 15;84(12):1635-42. PMID: 23022230.

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**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.