

Certificate of Analysis

Print Date: Jan 14th 2016 **WWW.tocris.com**

Product Name: Pitavastatin calcium Catalog No.: 4942 Batch No.: 1

CAS Number: 147526-32-7

IUPAC Name: (3R,5S,6E)-7-[2-Cyclopropyl-4-(4-fluorophenyl)-3-quinolinyl]-3,5-dihydroxy-6-heptenoic acid hemicalcium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{25}H_{23}FNO_4.0.5Ca.2H_2O$

Batch Molecular Weight: 476.53 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D = +22.6$ (Concentration = 1, Solvent = MeCN/H2O1:1)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.01 5.71 2.94 Found 62.6 5.3 3



Product Information

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Description:

Synthetic inhibitor of HMG-CoA reductase ($K_i = 1.7 \text{ nM}$). Lowers low-density lipoprotein (LDL) cholesterol levels. Displays minimal metabolism by cytochrome P450 enzymes, with little involvement of CYP3A4. Shown to improve cardiac function and survival in a rat model of hypertensive heart failure.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₅H₂₃FNO₄.0.5Ca.2H₂O

Batch Molecular Weight: 476.53 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Desiccate at RT

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:

Aoki *et al* (1997) Pharmacological profile of a novel synthetic inhibitor of 3-hydroxy-3-methylglutaryl-coenzyme A reductase. Arzneimittelforschung. *47* 904. PMID: 9296275.

Mukhtar et al (2005) Pitavastatin. Int.J.Clin.Pract. 59 239. PMID: 15854203.

Saka et al (2006) Pitavastatin improves cardiac function and survival in association with suppression of the myocardial endothelin system in a rat model of hypertensive heart failure. J.Cardiovasc.Pharmacol. **47** 770. PMID: 16810078.