

PRODUCT INFORMATION



Pitavastatin (calcium salt)

Item No. 15414

CAS Registry No.: 147526-32-7
Formal Name: (3R,5S,6E)-7-[2-cyclopropyl-4-(4-fluorophenyl)-3-quinoliny]-3,5-dihydroxy-6-heptenoic acid, monocalcium salt

Synonyms: Itabastatin, Itavastatin, NK 104

MF: $[C_{25}H_{23}FNO_4]_2 \cdot Ca$

FW: 881.0

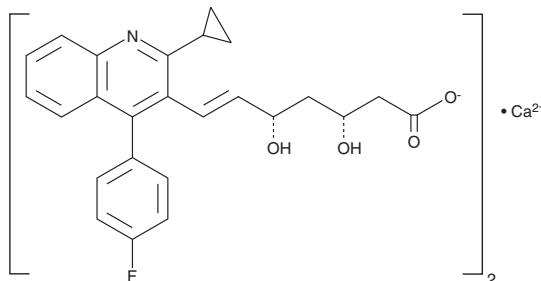
Purity: $\geq 98\%$

UV/Vis.: λ_{max} : 245 nm

Supplied as: A crystalline solid

Storage: $-20^\circ C$

Stability: ≥ 2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Pitavastatin (calcium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the pitavastatin (calcium salt) in the solvent of choice. Pitavastatin (calcium salt) is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of pitavastatin (calcium salt) in these solvents is approximately 25 and 30 mg/ml, respectively.

Pitavastatin (calcium salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, pitavastatin (calcium salt) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Pitavastatin (calcium salt) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

The statins are a family of compounds that inhibit 3-hydroxy-3-methyl glutaryl coenzyme A (HMG-CoA) reductase, a pivotal enzyme in cholesterol biosynthesis.¹ Pitavastatin is a potent inhibitor of HMG-CoA reductase ($K_i = 1.7$ nM).² It lowers both total cholesterol and low density lipoprotein cholesterol in animals and humans.³ Metabolism of pitavastatin by the cytochrome P450 system is minimal, reducing the risk of drug-drug interactions.³ Moreover, pitavastatin causes atherosclerosis regression in humans with subclinical carotid atherosclerosis and improves cardiac function and survival in a rat model of hypertensive heart failure.^{4,5}

References

1. Pahan, K. *Cell Mol. Life Sci.* **63(10)**, 1165-1178 (2006).
2. Aoki, T., Nishimura, H., Nakagawa, S., et al. *Arzneimittelforschung* **47**, 904-909 (1997).
3. Mukhtar, R.Y., Reid, J., and Reckless, J.P. *Int. J. Clin. Pract.* **59(2)**, 239-252 (2005).
4. Ikeda, K., Takahashi, T., Yamada, H., et al. *Eur. J. Prev. Cardiol.* **20(6)**, 1069-1079 (2013).
5. Saka, M., Obata, K., Ichihara, S., et al. *J. Cardiovasc. Pharmacol.* **47(6)**, 770-779 (2006).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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