Pitavastatin (calcium salt)

Item No. 15414

CAS Registry No.: 147526-32-7
Formal Name: (3R,5S,6E)-7-[2-cyclopropyl-4-(4-fluorophenyl)-3-quinolinyl]-3,5-dihydroxy-6-hepeneoic acid, monocalcium salt
Synonyms: Itabastatin, Itavastatin, NK 104
MF: [C25H24FNO4]2 • Ca
FW: 881.0
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: λ<sub>max</sub>: 245 nm

Laboratory Procedures

For long term storage, we suggest that pitavastatin (calcium salt) be stored as supplied at -20°C. It should be stable for at least two years.

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.

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. Pitavastatin is a potent inhibitor of HMG-CoA reductase (K<sub>i</sub> = 1.7 nM). It lowers both total cholesterol and low density lipoprotein cholesterol in animals and humans. Metabolism of pitavastatin by the cytochrome P450 system is minimal, reducing the risk of drug-drug interactions. 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


Related Products

For a list of related products please visit: www.caymanchem.com/catalog/15414

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent to your institution.

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