

PRODUCT INFORMATION



4-hydroxy Atorvastatin (calcium salt)

Item No. 22575

CAS Registry No.: 265989-44-4
Formal Name: 2-(4-fluorophenyl)- β R, δ R-dihydroxy-4-[[[4-(4-hydroxyphenyl)amino]carbonyl]-5-(1-methylethyl)-3-phenyl-1H-pyrrole-1-heptanoic acid, hemicalcium salt

Synonyms: *p*-hydroxy Atorvastatin, *para*-hydroxy Atorvastatin

MF: C₃₃H₃₄FN₂O₆ • 1/2Ca
FW: 593.7

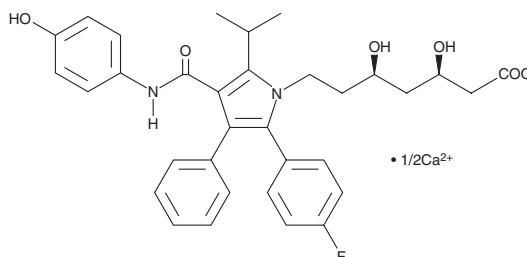
Purity: \geq 90%

UV/Vis.: λ_{max} : 253 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: \geq 4 years



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

Laboratory Procedures

4-hydroxy Atorvastatin (calcium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the 4-hydroxy atorvastatin (calcium salt) in the solvent of choice, which should be purged with an inert gas. 4-hydroxy Atorvastatin (calcium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 4-hydroxy atorvastatin (calcium salt) in these solvents is approximately 0.5, 15, and 25 mg/ml, respectively.

4-hydroxy Atorvastatin (calcium salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 4-hydroxy atorvastatin (calcium salt) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 4-hydroxy Atorvastatin (calcium salt) has a solubility of approximately 0.1 mg/ml in a 1:9 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

4-hydroxy Atorvastatin is a metabolite of atorvastatin (Item No. 10493), an HMG-CoA reductase inhibitor present in formulations that have been used to treat hypercholesterolemia and certain dyslipidemias.¹⁻⁴ Atorvastatin is metabolized by the cytochrome P450 (CYP) isoform CYP3A4 to form 4-hydroxy atorvastatin.¹

References

1. Lennernäs, H. *Clin. Pharmacokinet.* **42**(13), 1141-1160 (2003).
2. Dart, A., Jerums, G., Nicholson, G., et al. *Am. J. Cardiol.* **80**(1), 39-44 (1997).
3. The Diabetes Atorvastatin Lipid Intervention (DALI) Study Group. *Diabetes Care* **24**(8), 1335-1341 (2001).
4. van Dam, M., Zwart, M., de Beer, F., et al. *Heart* **88**(3), 234-238 (2002).

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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