# PRODUCT INFORMATION

## Atorvastatin (calcium salt)

*Item No. 10493*

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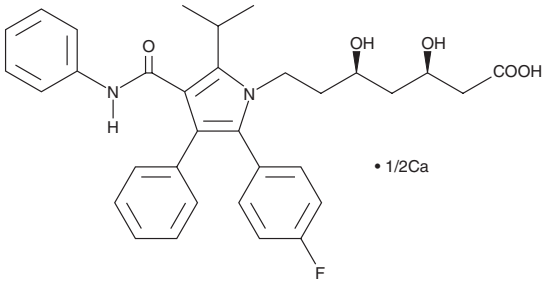
| **CAS Registry No.:** | 134523-03-8 |
| **Formal Name:** | 2-(4-fluorophenyl)-βR,δR-dihydroxy-5-(1-methylethyl)-3-phenyl-4-[(phenylamino)carbonyl]-1H-pyrrole-1-heptanoic acid, hemicalcium salt |
| **MF:** | $C_{33}H_{35}FN_2O_5 \bullet 1/2Ca$ |
| **FW:** | 578.7 |
| **Purity:** | ≥98% |
| **UV/Vis.:** | $\lambda_{max}$: 247 nm |
| **Supplied as:** | A crystalline solid |
| **Storage:** | -20°C |
| **Stability:** | ≥2 years |




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

### Laboratory Procedures

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

Atorvastatin (calcium salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, atorvastatin (calcium salt) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 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

Atorvastatin is an inhibitor of HMG-CoA reductase, the rate-limiting enzyme in the mevalonate pathway of cholesterol synthesis, that has $IC_{50}$ values of 73, 102, and 0.6 nM for HepG2 cells, human fibroblasts, and rat hepatocytes, respectively.[1] Formulations containing atorvastatin have been used in the treatment of hypercholesterolemia and certain dyslipidemias.

### Reference


1. Shaw, M.K., Newton, R.S., Sliskovic, D.R., *et al.* Hep-G2 cells and primary rat hepatocytes differ in their response to inhibitors of HMG-CoA reductase. *Biochem. Biophys. Res. Commun.* **170(2)**, 726-734 (1990).





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