

PRODUCT INFORMATION



2-hydroxy Atorvastatin (calcium salt)

Item No. 30974

CAS Registry No.: 265989-46-6
Formal Name: (βR,δR)-2-(4-fluorophenyl)-β,δ-dihydroxy-4-[[[(2-hydroxyphenyl)amino]carbonyl]-5-(1-methylethyl)-3-phenyl-1H-pyrrole-1-heptanoic acid, calcium salt (2:1)

Synonyms: o-hydroxy Atorvastatin, ortho-hydroxy Atorvastatin, BMS 243887-01, PD 152873

MF: C₃₃H₃₄FN₂O₆ • 1/2Ca

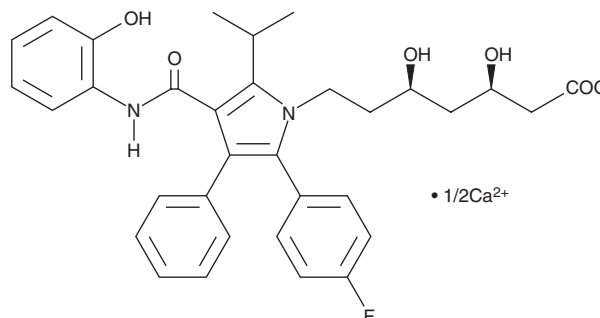
FW: 593.7

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

2-hydroxy Atorvastatin (calcium salt) is supplied as a solid. A stock solution may be made by dissolving the 2-hydroxy atorvastatin (calcium salt) in the solvent of choice, which should be purged with an inert gas. 2-hydroxy Atorvastatin (calcium salt) is soluble in methanol and DMSO.

Description

2-hydroxy Atorvastatin is an active metabolite of the HMG-CoA reductase inhibitor atorvastatin (Item No. 10493).¹ 2-hydroxy Atorvastatin is formed from atorvastatin by the cytochrome P450 (CYP) isoform CYP3A4. It inhibits lipid hydroperoxide formation and copper sulfate-induced thiobarbituric acid reactive substances (TBARS) formation in 1,2-dilinoleoyl-*sn*-glycero-3-PC (DLPC; Item No. 20954) vesicles and human LDL, respectively, in a concentration-dependent manner.² 2-hydroxy Atorvastatin reduces cell death induced by oxygen-glucose deprivation (OGD) in primary rat cortical neurons and increases phosphorylation of cAMP-response-element-binding protein (CREB) in GABAergic neurons when used at a concentration of 600 nM following OGD.³

References

1. Park, J.-E., Kim, K.-B., Bae, S.K., *et al.* Contribution of cytochrome P450 3A4 and 3A5 to the metabolism of atorvastatin. *Xenobiotica* **38**(9), 1240-1251 (2008).
2. Mason, R.P., Walter, M.F., Day, C.A., *et al.* Active metabolite of atorvastatin inhibits membrane cholesterol domain formation by an antioxidant mechanism. *J. Biol. Chem.* **281**(14), 9337-9345 (2006).
3. Guirao, V., Martí-Sistac, O., DeGregorio-Rocasolano, N., *et al.* Specific rescue by ortho-hydroxy atorvastatin of cortical GABAergic neurons from previous oxygen/glucose deprivation: Role of pCREB. *J. Neurochem.* **143**(3), 359-374 (2017).

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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