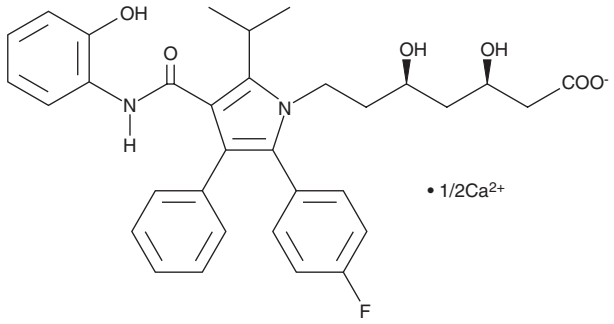
PRODUCT INFORMATION

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: $C_{33}H_{34}FN_2O_6$ • 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).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM