

Product Information

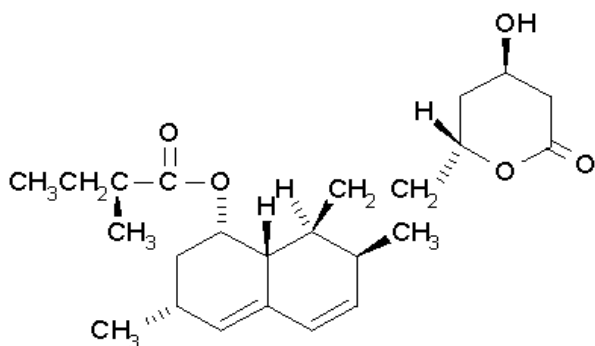
Mevinolin from *Aspergillus* sp.

Product Number **M 2147**

Store at 2-8 °C

CAS RN: 75330-75-5

Synonyms: Lovastatin,,, 6 α -Methylcompactin;
Monacolin K; Mevacor[®]; 2-Methyl-1,2,3,7,8,8a-
hexahydro-3,7-dimethyl-8-[2-(tetrahydro-4-hydroxy-6-
oxo-2H-pyran-2-yl)ethyl]-1-naphthalenyl ester butanoic
acid



Molecular Formula: C₂₄H₃₆O₅

Molecular Weight: 404.54

Product Description

Mevinolin, which is a fungal metabolite isolated from the fungus *Aspergillus* sp, is a potent anti-hypercholesterolemic agent and a competitive inhibitor of 3-hydroxy-3-methylglutaryl coenzyme A (HMG-CoA)^{1,2}.

Mevinolin inhibits cell proliferation due to cell cycle arrest in a dose-dependent manner. In HL-60 and MOLT cell lines, concentrations of 10 μ M and 50 μ M causes arrest at the G2 and the G1 phases respectively.³ It was found to inhibit the proliferation of pancreatic cell line with normal or mutant K-ras

oncogene⁴ and significantly decreased protein phosphorylation on tyrosine, serine and threonine in p21ras-M (mutant) cells.

Mevinolin induced apoptosis and DNA fragmentation in cancer cell lines such as human malignant mesothelioma⁵, prostate cancer cell line LNCaP⁹, prostate stromal cells⁶, HL-60 cells⁷, murine B cells⁸ and others, probably via Caspase 7 that was reported to be a potential mediator of Mevinolin induced apoptosis⁹

Mevinolin reduced the platelet aggregation, macrophage foam cell formation and LDL oxidation and thereby can significantly attenuate the atherosclerotic process⁶

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

The product is soluble (10 mg/ml) in ethanol. It is also soluble in methanol, chloroform, acetone, acetonitrile, DMSO, DMF and slightly soluble in water (0.4 μ g/ml).¹⁰

Storage/Stability

Store desiccated and protected from light at 2- 8 °C. The product as supplied is stable for 4 years when stored properly.

References

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