

PRODUCT DATA SHEET

Lovastatin Code: BIA-L1264

Pack sizes: 25 mg, 100 mg

Synonyms : Mevinolin, Monacolin K, Antibiotic L 154803, Antibiotic MB 530B, Antibiotic MSD

803, L 154803, MB 530B, MSD 803

Specifications

CAS # : 75330-75-7 Molecular Formula : $C_{24}H_{36}O_{5}$ Molecular Weight : 404.5

Source : *Monascus ruber*Appearance : White powder

Purity : >98% Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Lovastatin (mevinolin) is a metabolite first isolated from *Monascus ruber* and later found in several other fungal species. Lovastatin acts as a potent inhibitor of 3-hydroxy-3-methyl-glutaryl-CoA reductase (HMG-CoA). HMG-CoA is the rate-controlling enzyme of the mevalonate pathway, responsible for the biosynthesis of cholesterol. Lovastatin was developed as a drug for lowering LDL cholesterol as a hypolipemic agent.

References

- 1. Monacolin K, a new hypocholesterolemic agent produced by a *Monascus* species. Endo A. J. Antibiot. **1979**, 32, 852.
- 2. Monacolin K, a new hypocholesterolemic agent that specifically inhibits 3-hydroxy-3-methylglutaryl coenzyme A reductase. Endo A. J. Antibiot. **1980**, 33, 334.
- 3. Mevinolin: a highly potent competitive inhibitor of hydroxymethylglutaryl-coenzyme A reductase and a cholesterol-lowering agent. Alberts A. W. *et al.* Proc. Natl. Acad. Sci. U.S.A. **1980**, 77, 3957.