

## Lovastatin (Mevinolin) PRODUCT DATA SHEET

issue date 01/06/2020

Product Name: Lovastatin (Mevinolin)

Product Number: L013

**CAS Number:** 75330-75-5

Molecular Formula:  $C_{24}H_{36}O_5$ 

Molecular Weight: 404.54

Form: Powder

Appearance: White crystalline powder

Solubility: Water: 0.4 µg/mL

Source: Monascus Ruber

Optical Rotation: +234° to +338°

Storage Conditions: 2-8°C

**Description:** Lovastatin is a statin prodrug commonly used to combat hypercholesterolemia.

Lovastatin inhibits HMG-CoA reductase, a significant enzyme involved in the cholesterol synthesis pathway. Lovastatin is insoluble in aqueous solution.

**Mechanism of Action:** Lovastatin is an inhibitor of 3-hydroxy-3methylglutaryl-coenzyme A reductase

(HMG-CoA reductase), an enzyme that catalyzes the conversion of HMG-CoA

to mevalonate

**Cancer Applications** Research has shown that statin drugs including lovastatin have been able to

inhibit melanoma cell growth when high concentrations are used.

**References:** Eustace, A. J., and et al. "The 3-hydroxy-3-methylglutaryl-coenzyme A

Reductase Inhibitors, Simvastatin, Lovastatin and Mevastatin Inhibit Proliferation and Invasion of Melanoma Cells." *BMC Cancer* 8.9 (2008):

www.ncbi.gov. 16 Jan. 2008. Web. 31 Aug. 2012.

If you need any help, contact us: info@toku-e.com. Find more information on: www.toku-e.com/