

Product Name:	Mevastatin (Compactin)
Product Number:	M004
CAS Number:	73573-88-3
Molecular Formula:	$C_{23}H_{34}O_5$
Molecular Weight:	390.51
Form:	Powder
Appearance:	Crystals from aqueous ethanol; White powder
Solubility:	DMSO: 20 mg/mL Ethanol: 25 mg/mL
Source:	<i>Penicillium Citrinum</i> .
Absorbance:	UV max: 230, 237 and 246 nm (log ϵ 4.28, 4.30, 4.11)
Melting Point:	152 °C
Optical Rotation:	$[\alpha]_D^{22} = +283^\circ$ (c = 0.48 in acetone)
Storage Conditions:	2-8 °C
Description:	Mevastatin is a statin prodrug commonly used to combat hypercholesterolemia. Mevastatin is insoluble in water, and soluble in ethanol and DMSO at 25 mg/mL.
Mechanism of Action:	Mevastatin inhibits HMG-CoA reductase, a significant enzyme involved in the cholesterol synthesis pathway.
Cancer Applications	Research has shown that statin drugs including mevastatin 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." <i>BMC Cancer</i> 8.9 (2008): www.ncbi.gov . 16 Jan. 2008. Web. 31 Aug. 2012.