**Mevastatin**

**Synonyms**: Compactin, ML 236B, SIPI 8915

**Specifications**

- **CAS #**: 73573-88-3
- **Molecular Formula**: C_{23}H_{34}O_{5}
- **Molecular Weight**: 390.5
- **Source**: *Penicillium* sp.
- **Appearance**: White solid
- **Purity**: >95% by HPLC
- **Long Term Storage**: -20°C
- **Solubility**: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

**Application Notes**

Mevastatin (compactin) is a diterpene produced by several species of the genera *Penicillium* and *Monascus*, first reported in 1976. Mevastatin, the prototype of the statin class, is a potent competitive inhibitor of HMG-CoA reductase, a regulatory enzyme for cholesterol biosynthesis. Mevastatin has also been shown to induce apoptosis by inhibiting post-translational prenylation of proteins such as Ras, increasing eNOS mRNA and protein levels by blocking the geranylgeranylation of Rho, and inhibiting myoblast fusion. It induces cell cycle arrest in late G1 phase and may induce bone morphogenic protein-2 (BMP-2).

**References**