# PRODUCT INFORMATION

## Cerivastatin (sodium salt)

*Item No. 20362*

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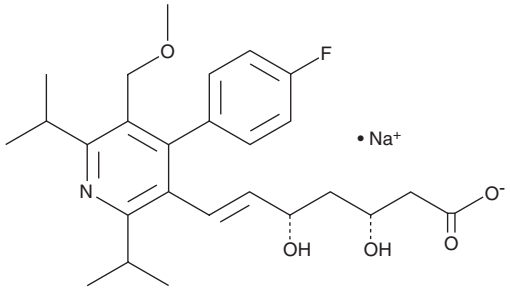
| **CAS Registry No.:** | 143201-11-0 |
| **Formal Name:** | (3R,5S,6E)-7-[4-(4-fluorophenyl)-5-(methoxymethyl)-2,6-*bis*(1-methylethyl)-3-pyridinyl]-3,5-dihydroxy-6-heptenoic acid, monosodium salt |
| **Synonym:** | BAY-w 6228 |
| **MF:** | $C_{26}H_{33}FNO_5$ • Na |
| **FW:** | 481.5 |
| **Purity:** | ≥98% |
| **Supplied as:** | A solid |
| **Storage:** | -20°C |
| **Stability:** | ≥4 years |




*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

### Laboratory Procedures

Cerivastatin (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the cerivastatin (sodium salt) in the solvent of choice, which should be purged with an inert gas. Cerivastatin (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of cerivastatin (sodium salt) in ethanol is approximately 0.5 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of cerivastatin (sodium salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of cerivastatin (sodium salt) in PBS, pH 7.2, is approximately 0.2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Cerivastatin is an inhibitor of 3-hydroxy-3-methylglutaryl coenzyme A (HMG-CoA) reductase ($K_i$ = 1.3 nM).[1,2] It inhibits cholesterol synthesis in and growth of human arterial myocytes ($IC_{50}$s = 0.4 and 4.6 nM, respectively).[1] Cerivastatin inhibits proliferation of rat aorta smooth muscle cells and reduces fibrinogen-induced migration of rat aortic myocytes in a concentration-dependent manner. *In vivo*, cerivastatin inhibits cholesterol biosynthesis in rats and dogs ($ED_{50}$ = 0.002 mg/kg for both).[2] It reduces serum levels of cholesterol, triglycerides, and low-density lipoprotein (LDL) in dogs in a dose-dependent manner. Cerivastatin (0.1 mg/kg) decreases cholesterol ester accumulation in arterial tissue of rabbits fed a 0.2% cholesterol diet. It also stabilizes plaques and delays progression into atherosclerotic disease in LDL-receptor deficient rabbits with hypercholesterolemia.[3]

### References


1. Corsini, A., Arnaboldi, L., Raiteri, M., *et al. Pharmacol. Res.* **33(1)**, 55-61 (1996).
2. Bischoff, H., Angerbauer, R., Bender, J., *et al. Atherosclerosis* **135(1)**, 119-130 (1997).
3. Shiomi, M. and Ito, T. *Br. J. Pharmacol.* **126(4)**, 961-968 (1999).





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