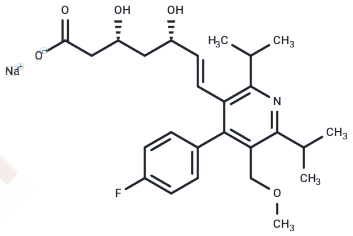
Data Sheet (Cat.No.T10767)

TargetMol

Cerivastatin sodium

Chemical Properties



CAS No. : 143201-11-0

Formula: C26H33FNNaO5

Molecular Weight: 481.53

Storage: Store at low temperature,Keep away from direct sunlight,Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Cerivastatin sodium (BAY W 6228 sodium) is an orally active and highly potent HMG-CoA reductase inhibitor with lipid-lowering activity that can reduce low-density lipoprotein cholesterol levels. Cerivastatin sodium has anticancer effects and can be used to study primary hyperlipidemia.
Targets(IC50)	Ferroptosis,Opioid Receptor,HMG-CoA Reductase
In vitro	Cerivastatin sodium 5-50 ng/mL treatment induces a dose-dependent decrease in cell proliferation of MDA-MB-231 cells (up to 40% inhibition at 25 ng/mL), and 10-25 ng/mL Cerivastatin sodium inhibits invasion of MDA-MB-231 cells through Matrigel. [1] 25 ng/mL Cerivastatin sodium delocalizes RhoA and Ras from the membrane to the cytosol and induces morphological changes, and induces a marked increase in the level of p21Waf1/Cip1. This treatment increases the p21 transcript in MDA-MB-231 cells, and induces inactivation of NFκB, in a RhoA inhibition-dependent manner, resulting in a decrease in urokinase and metalloproteinase-9 expression, and concomitantly increases IκB. [1]
In vivo	Cerivastatin sodium is well absorbed, reaching maximum plasma concentrations within 1-3 hours after oral administration. In the circulation, it is highly bound to plasma proteins (99.5%) and has an elimination half-life of 2-4 h. Cerivastatin sodium is metabolized primarily by the liver to three polar metabolites. Two of these metabolites are somewhat active, but much less so than the prodrug, while the third metabolite is inactive. Plasma concentrations of these metabolites are much lower than those of the prodrug. The metabolites are excreted primarily in the urine (20-25%) and feces (66-73%), with little detectable excretion of the unchanged prodrug. [2]

Solubility Information

Solubility	H2O: 80 mg/mL (166.14 mM),Sonication is recommended. DMSO: 80 mg/mL (166.14 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0767 mL	10.3836 mL	20.7671 mL
5 mM	0.4153 mL	2.0767 mL	4.1534 mL
10 mM	0.2077 mL	1.0384 mL	2.0767 mL
50 mM	0.0415 mL	0.2077 mL	0.4153 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Denoyelle C, et al. Cerivastatin, an inhibitor of HMG-CoA reductase, inhibits the signaling pathways involved in the invasiveness and metastatic properties of highly invasive breast cancer cell lines: an in vitro study. Carcinogenesis. 2001 Aug;22(8):1139-48.

Li W, Feng Y, Feng Z, et al.Pitavastatin Calcium Confers Fungicidal Properties to Fluconazole by Inhibiting Ubiquinone Biosynthesis and Generating Reactive Oxygen Species.Antioxidants.2024, 13(6): 667.

Stein E, et al. Cerivastatin, a New Potent Synthetic HMG Co-A Reductase Inhibitor: Effect of 0.2 mg Daily in Subjects With Primary Hypercholesterolemia. J Cardiovasc Pharmacol Ther. 1997 Jan;2(1):7-16.

Furberg CD, et al. Withdrawal of cerivastatin from the world market. Curr Control Trials Cardiovasc Med. 2001;2(5): 205-207.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481