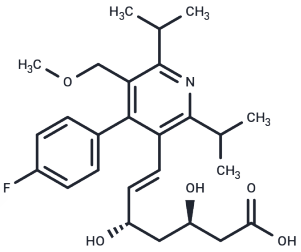
Data Sheet (Cat.No.T14931)

TargetMol

Cerivastatin

Chemical Properties



CAS No. : 145599-86-6

Formula: C26H34FNO5

Molecular Weight: 459.55

Storage: Keep away from moisture
Pure form: -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 is an orally active and highly effective HMG-CoA reductase inhibitor with anticancer and lipid-lowering effects. Cerivastatin can reduce low-density lipoprotein cholesterol levels, inhibit the proliferation and invasion of MDA-MB-231 cells, and can be used to study primary hyperlipidemia.
Targets(IC50)	Ferroptosis,HMG-CoA Reductase
In vitro	Cerivastatin induced a dose-dependent decrease in cell proliferation of MDA-MB-231 cells (up to 40% inhibition at 25 ng/ml). In contrast, Cerivastatin treatment did not significantly modify MCF-7 cell proliferation. Flow cytometry analysis showed that Cerivastatin induced an arrest of the cell cycle in G 1 /S phase (67.1% in Cerivastatin -treated cells) after 36 h treatment. [1]
In vivo	Trametinib and Cerivastatin were initially dissolved in DMSO and diluted into an aqueous pooled dose containing a final concentration of 0.5% hypromellose and 0.05% Tween-80, in saline. Generated xenografts of a primary monosomic BAP1-mutated human UM cell line, UPMM3, in highly immunodeficient NOD.Cg-Prkdcscid Il2rgtm1wjl/SzJ mice to validate the effects of trametinib and Cerivastatin combination on UM cells in vivo. One week after subcutaneous injection of UPMM3 cells, when the tumour was palpable, four mice per group were treated with vehicle, trametinib (1 mg/kg, per os, three days/week), Cerivastatin (2 mg/kg per os, three days/week) or trametinib and Cerivastatin for 57 days (until day 64). The end of treatment was followed by 15 days of observation. The addition of Cerivastatin determined a significantly stronger inhibition of tumour growth compared with mice treated with trametinib alone (p = 0.03). [4]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.176 mL	10.8802 mL	21.7604 mL
5 mM	0.4352 mL	2.176 mL	4.3521 mL
10 mM	0.2176 mL	1.088 mL	2.176 mL
50 mM	0.0435 mL	0.2176 mL	0.4352 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.

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.

Amaro AA, et al. Cerivastatin Synergizes with Trametinib and Enhances Its Efficacy in the Therapy of Uveal Melanoma. Cancers (Basel). 2023 Jan 31;15(3):886.