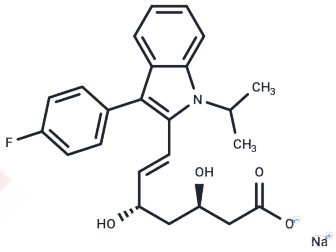
Data Sheet (Cat.No.T1487)

TargetMol

Fluvastatin sodium

Chemical Properties



CAS No. : 93957-55-2

Formula: C24H25FNNaO4

Molecular Weight: 433.45

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Fluvastatin sodium (Fluvastatin sodium salt), a competitive inhibitor of hydroxymethylglutaryl-coenzyme A reductase (HMGCR), is a commonly used cholesterol lowering agent.
Targets(IC50)	Ferroptosis,HMG-CoA Reductase,Autophagy
In vitro	In a rabbit model, daily administration of Fluvastatin (10 mg/kg) significantly reversed the inhibition of acetylcholine-induced vasodilation, effectively reducing hyperlipidemia.
In vivo	In human aortic smooth muscle cells, Fluvastatin (100 nM) reduces the formation of superoxide anion radicals activated by angiotensin II. In CHL/IU cells, Fluvastatin (8 μM) offers protection against DNA damage. It significantly inhibits the formation of thiobarbituric acid-reactive substances in lipid peroxidation initiated by divalent iron ions (IC50=12 μM). Fluvastatin (1-100 μM) can inhibit lipid peroxidation mediated by peroxyl radicals induced by 2,2'-azobis(2-amidinopropane) dihydrochloride and 2,2'-azobis.

Solubility Information

Solubility	H2O: 10.8 mg/mL (24.92 mM),Sonication is recommended. DMSO: 43.3 mg/mL (99.9 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3071 mL	11.5354 mL	23.0707 mL
5 mM	0.4614 mL	2.3071 mL	4.6141 mL
10 mM	0.2307 mL	1.1535 mL	2.3071 mL
50 mM	0.0461 mL	0.2307 mL	0.4614 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.

Reference

Dansette PM, et al. Exp Toxicol Pathol, 2000, 52(2), 145-148.
Zhang W, Pan X, Xu Y, et al.Mevalonate improves anti-PD-1/PD-L1 efficacy by stabilizing CD274 mRNA.Acta Pharmaceutica Sinica B.2023
In vivo vulnerabilities to GPX4 and HDAC inhibitors in drug-persistent versus drug-resistant BRAFV600E lung adenocarcinoma
Yamamoto A, et al. J Pharm Pharmacol, 2001, 53(2), 227-232.
Imaeda A, et al. Free Radic Res, 2001, 35(6), 789-801.
Kugi M, et al. Cardiovasc Drugs Ther, 2002, 16(3), 203-207.
Mitani H, et al. Br J Pharmacol, 1996, 119(6), 1269-1275.