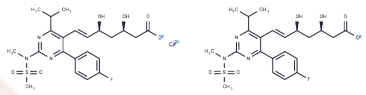
Data Sheet (Cat.No.T1510)

TargetMol

Rosuvastatin calcium

Chemical Properties



CAS No. : 147098-20-2

Formula: 2(C22H27FN3O6S)Ca

Molecular Weight: 1001.14

Appearance: no data available

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

Biological Description

Description	Rosuvastatin calcium (ZD4522) , a selective and competitive inhibitor of hepatic hydroxymethyl-glutaryl coenzyme A (HMG-CoA) reductase, has antilipidemic activity.
Targets(IC50)	HMG-CoA Reductase,Autophagy,Potassium Channel
In vitro	In streptozotocin-induced diabetic rats, daily administration of Rosuvastatin (20 mg/kg) significantly reduces the content of very low-density lipoprotein (VLDL) within the body. Similarly, in male beagles with normal cholesterol levels, Rosuvastatin (3 mg/kg) effectively lowers the concentration of cholesterol in the plasma.
In vivo	In isolated rat hepatocytes (IC50=1.12 nM), Rosuvastatin acts as a high-affinity substrate for OATP-C, inhibiting cholesterol synthesis. Additionally, in endothelial cells, Rosuvastatin suppresses the expression and protein levels of ICAM-1, MCP-1, IL-8, IL-6, and COX-2 mRNA by inhibiting the c-Jun N-terminal kinase and nuclear factor-kB.

Solubility Information

Solubility	DMSO: 100 mg/mL (199.77 mM),Heating is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.9989 mL	4.9943 mL	9.9886 mL
5 mM	0.1998 mL	0.9989 mL	1.9977 mL
10 mM	0.0999 mL	0.4994 mL	0.9989 mL
50 mM	0.020 mL	0.0999 mL	0.1998 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

Watanabe M, et al. Bioorg Med Chem, 1997, 5(2), 437-444.
Tan X D, Luo C F, Liang S Y.Antihyperlipidemic drug rosuvastatin suppressed tumor progression and potentiated chemosensitivity by downregulating CCNA2 in lung adenocarcinoma.Journal of Chemotherapy.2024: 1-13.
Kowal-Chwast A, Gabor-Worwa E, Gaud N, et al.Novel method of measurement of in vitro drug uptake in OATP1B3 overexpressing cells in the presence of dextran.Pharmacological Reports.2024: 1-16.

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481