

Product Data Sheet

Product Name: Rosuvastatin D6 Sodium

Cat. No.: GC37561

Chemical Properties

Cas. No.

SMILES O=C([O-])C[C@H](O)C[C@H](O)/C=C/C1=C(C(C([2H]))([2H])[2H])C([2H])([2H])[2H])N=C(N(C)S(=O)(C)=O)N=C1C2=CC=C(F)C=C2.[Na+]

Formula C₂₂H₂₁D₆FN₃NaO₆S

M.Wt 509.56

Solubility Soluble in DMSO

Storage Store at -20°C

General tips

For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

Background

Rosuvastatin-d₆ is intended for use as an internal standard for the quantification of rosuvastatin by GC- or LC-MS. Rosuvastatin is an inhibitor of HMG-CoA reductase (IC₅₀ = 5 nM).¹ It inhibits cholesterol synthesis in isolated rat hepatocytes with an IC₅₀ value of 0.16 nM.² Rosuvastatin (10 mg/kg) reduces plasma total cholesterol, triglyceride, LDL-C, and oxidized LDL-C levels in *Ldlr*^{-/-} mice fed a high-fat diet.³ It decreases the area of aortic atherosclerotic lesions in the same model. Formulations containing rosuvastatin have been used in the treatment of dyslipidemias.

1. Istvan, E.S., and Deisenhofer, J. Structural mechanism for statin inhibition of HMG-CoA reductase *Science* 292(5519)1160-1164(2001)
 2. McTaggart, F., Buckett, L., Davidson, R., et al. Preclinical and clinical pharmacology of Rosuvastatin, a new 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitor *Am. J. Cardiol.* 87(5A)28B-32B(2001)
 3. Guo, H., Shi, Y., Liu, L., et al. Rosuvastatin inhibits MMP-2 expression and limits the progression of atherosclerosis in LDLR-deficient mice *Arch. Med. Res.* 40(5)345-351(2009)

Caution: Product has not been fully validated for medical applications. For research use only.

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