# **PRODUCT** INFORMATION

0 0



Rosuvastatin-d<sub>6</sub> (sodium salt)

Item No. 23359

CAS Registry No.: Formal Name:	2070009-41-3 (3R,5S,E)-7-(4-(4-fluorophenyl)- 2-(N-methylmethylsulfonamido)- 6-(propan-2-yl-1,1,1,3,3,3-d <sub>2</sub> )	
	pyrimidin-5-yl)-3,5-dihydroxyhept- 6-enoate, monosodium salt	
MF:	$C_{22}H_{21}D_{4}FN_{3}O_{6}S \bullet Na$	
FW:	509.6	D T D F
Purity:	≥98%	
Supplied as:	A solid	0 · OH · Na*
Storage:	-20°C	ľ, ľ
Stability:	≥4 years	-0ОН

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

Rosuvastatin-d<sub>6</sub> (sodium salt) is intended for use as an internal standard for the quantification of rosuvastatin (Item Nos. 12029 | 18813) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Rosuvastatin-d<sub>6</sub> (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the rosuvastatin-d<sub>6</sub> (sodium salt) in the solvent of choice. Rosuvastatin-d<sub>6</sub> (sodium salt) is soluble in the organic solvent methanol, which should be purged with an inert gas.

## Description

Rosuvastatin is an inhibitor of HMG-CoA reductase ( $IC_{50} = 5 \text{ nM}$ ).<sup>1</sup> It inhibits cholesterol synthesis in isolated rat hepatocytes with an  $IC_{50}$  value of 0.16 nM.<sup>2</sup> Rosuvastatin (10 mg/kg) reduces plasma total cholesterol, triglyceride, LDL-C, and oxidized LDL-C levels in Ldlr/- mice fed a high-fat diet.<sup>3</sup> It decreases the area of aortic atherosclerotic lesions in the same model. Formulations containing rosuvastatin have been used in the treatment of dyslipidemias.

## References

- 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).
- 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).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

## WARRANTY AND LIMITATION OF REMEDY

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 10/11/2022

## CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM