

PRODUCT INFORMATION



Pitavastatin lactone-d₄

Item No. 34696

Formal Name: 6S-((E)-2-(2-cyclopropyl-4-(4-fluorophenyl)-2,3,5,6-d₄)quinolin-3-yl)vinyl)-4R-hydroxytetrahydro-2H-pyran-2-one

MF: C₂₅H₁₈D₄FNO₃

FW: 407.5

Chemical Purity: ≥90% (Pitavastatin lactone)

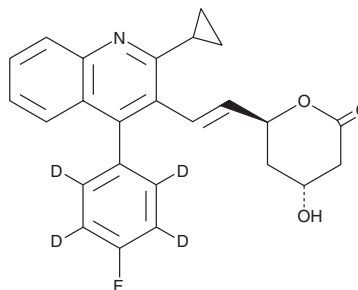
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀

UV/Vis.: λ_{max}: 245 nm

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

Pitavastatin lactone-d₄ is intended for use as an internal standard for the quantification of pitavastatin lactone (Item No. 21785) 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).

Pitavastatin lactone-d₄ is supplied as a solid. A stock solution may be made by dissolving the pitavastatin lactone-d₄ in the solvent of choice, which should be purged with an inert gas. Pitavastatin lactone-d₄ is soluble in ethanol.

Description

Pitavastatin lactone is a major phase 2 metabolite of the HMG-CoA reductase inhibitor pitavastatin (Item No. 15414).^{1,2} Pitavastatin lactone is formed when pitavastatin undergoes glucuronidation by the UDP-glucuronosyltransferase (UGT) isoforms UGT1A1, UGT1A3, or UGT2B7 to form pitavastatin glucuronide, which then undergoes non-enzymatic conversion to pitavastatin lactone. It can be retroconverted to pitavastatin via hydrolysis.

References

1. Fujino, H., Yamada, I., Shimada, S., *et al.* Metabolic fate of pitavastatin, a new inhibitor of HMG-CoA reductase: Human UDP-glucuronosyltransferase enzymes involved in lactonization. *Xenobiotica* **33**(1), 27-41 (2003).
2. Aoki, T., Nishimura, H., Nakagawa, S., *et al.* Pharmacological profile of a novel synthetic inhibitor of 3-hydroxy-3-methylglutaryl-coenzyme A reductase. *Arzneimittelforschung* **47**(8), 904-909 (1997).

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

Buyer 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, 11/22/2022

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