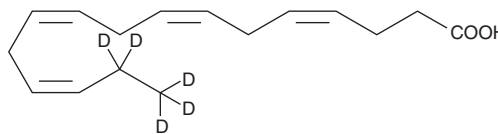


PRODUCT INFORMATION



4(Z),7(Z),10(Z),13(Z)-Hexadecatetraenoic Acid-d₅ Item No. 14894

CAS Registry No.: 2408811-79-8
Formal Name: (4Z,7Z,10Z,13Z)-hexadeca-4,7,10,13-tetraenoic-15,15',16,16,16-d₅ acid
Synonym: FA 16:4-d₅
MF: C₁₆H₁₉D₅O₂
FW: 253.4
Chemical Purity: ≥90% (4(Z),7(Z),10(Z),13(Z)-Hexadecatetraenoic Acid)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₅); ≤1% d₀
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

4(Z),7(Z),10(Z),13(Z)-Hexadecatetraenoic acid-d₅ is intended for use as an internal standard for the quantification of 4(Z),7(Z),10(Z),13(Z)-hexadecatetraenoic acid 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).

4(Z),7(Z),10(Z),13(Z)-Hexadecatetraenoic acid-d₅ is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 4(Z),7(Z),10(Z),13(Z)-hexadecatetraenoic acid-d₅ in these solvents is approximately 50 mg/ml.

Description

4(Z),7(Z),10(Z),13(Z)-Hexadecatetraenoic acid (16:4 n-3) is an impurity generated during the synthesis of docosahexaenoic acid-d₅ (Item No. 10005057). While the physiological properties of this compound are not known, dietary intake of n-3 long chain polyunsaturated fatty acids provides potential health benefits.¹

Reference

1. Vaughan, V.C., Hassing, M.-R., and Lewandowski, P.A. Marine polyunsaturated fatty acids and cancer therapy. *Br. J. Cancer* **108(3)**, 486-492 (2013).

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, 02/07/2024

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