PRODUCT INFORMATION



4(Z),7(Z),10(Z)-Tridecatrienoic Acid-d₅

Item No. 14895

Formal Name: (4Z,7Z,10Z)-trideca-4,7,10-trienoic-

12,12',13,13,13-d₅ acid

FA 13:3-d₅ Synonym: MF: $C_{13}H_{15}D_5O_2$ FW: 213.3

Chemical Purity: ≥90% (4(Z),7(Z),10(Z)-Tridecatrienoic Acid)

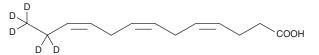
Deuterium

≥99% deuterated forms (d₁-d₅); ≤1% d₀ Incorporation:

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)-Tridecatrienoic acid-d₅ is intended for use as an internal standard for the quantification of 4(Z),7(Z),10(Z)-tridecatrienoic 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)-Tridecatrienoic acid-d_s 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 DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 4(Z),7(Z),10(Z)-tridecatrienoic acid-d₅ in these solvents is approximately 50 mg/ml.

Description

4(Z),7(Z),10(Z)-Tridecatrienoic acid (13:3 n-3) is an impurity generated during the synthesis of docosahexaenoic acid-d₅ (Item No. 10005057). Tridecatrienoic acid has also been isolated as methyl esters from algae. While the physiological properties of this compound are not known, dietary intake of n-3 long chain polyunsaturated fatty acids provides potential health benefits.²

References

- 1. Aliya, R., Shameel, M., Usmanghani, K., et al. Fatty acid compositions of two siphonaceous green algae from the coast of karachi. Pak. J. Pharm. Sci. 8(2), 47-54 (1995).
- 2. 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.

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, 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