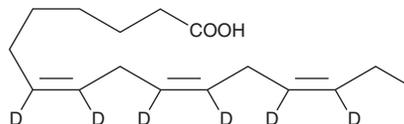


# PRODUCT INFORMATION



## 7(Z),10(Z),13(Z)-Hexadecatrienoic Acid-d<sub>6</sub> Item No. 28226

**CAS Registry No.:** 2692623-88-2  
**Formal Name:** 7Z,10Z,13Z-hexadecatrienoic-7,8,10,11,13,14-d<sub>6</sub> acid  
**Synonyms:** all-*cis*-7,10,13-Hexadecatrienoic Acid-d<sub>6</sub>, C16:3 n-3-d<sub>6</sub>, C16:3(7Z,10Z,13Z)-d<sub>6</sub>, FA 16:3-d<sub>6</sub>, Roughanic Acid-d<sub>6</sub>  
**MF:** C<sub>16</sub>H<sub>20</sub>D<sub>6</sub>O<sub>2</sub>  
**FW:** 256.4  
**Chemical Purity:** ≥98% (7(Z),10(Z),13(Z)-Hexadecatrienoic Acid)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>6</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A solution in ethanol, containing BHT  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

7(Z),10(Z),13(Z)-Hexadecatrienoic acid-d<sub>6</sub> is intended for use as an internal standard for the quantification of 7(Z),10(Z),13(Z)-hexadecatrienoic acid (Item No. 10005156) 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).

### Description

7(Z),10(Z),13(Z)-Hexadecatrienoic acid is an ω-3 polyunsaturated fatty acid that has been found in *S. olusatrum* leaves.<sup>1</sup> It is a precursor in the biosynthesis of jasmonic acid (Item No. 88300) in *A. thaliana* leaves.<sup>2</sup>

### References

1. Caprioli, G., Fiorini, D., Maggi, F., *et al.* Ascorbic acid content, fatty acid composition and nutritional value of the neglected vegetable Alexanders (*Smyrniolum olusatrum* L., Apiaceae). *J. Food Compos. Anal.* **35(1)**, 30-36 (2014).
2. Snoeren, T.A.L., Van Poecke, R.M.P., and Dicke, M. Multidisciplinary approach to unravelling the relative contribution of different oxylipins in indirect defense of *Arabidopsis thaliana*. *J. Chem. Ecol.* **35(9)**, 1021-1031 (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**  
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, 03/25/2024

### 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