

# PRODUCT INFORMATION

## 4(Z),7(Z),10(Z),13(Z)-Hexadecatetraenoic Acid

Item No. 9002202

CAS Registry No.: 29259-52-7  
Formal Name: 4Z,7Z,10Z,13Z-hexadecatetraenoic acid

MF:  $C_{16}H_{24}O_2$

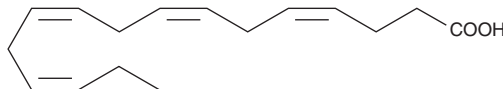
FW: 248.4

Purity:  $\geq 90\%$

Supplied as: A solution in ethanol

Storage:  $-20^{\circ}\text{C}$

Stability: As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly



### Laboratory Procedures

4(Z),7(Z),10(Z),13(Z)-Hexadecatetraenoic acid 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 in these solvents is approximately 50 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of 4(Z),7(Z),10(Z),13(Z)-hexadecatetraenoic acid is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 4(Z),7(Z),10(Z),13(Z)-hexadecatetraenoic acid in PBS, pH 7.2, is approximately 0.1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

4(Z),7(Z),10(Z),13(Z)-Hexadecatetraenoic acid is an unusual polyunsaturated fatty acid (PUFA) generated during the synthesis of docosahexaenoic acid- $d_5$  (Item No. 10005057). While the physiological properties of this compound are not known, dietary intake of n-3 long-chain PUFAs provides potential health benefits.<sup>1</sup>

### Reference

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

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