

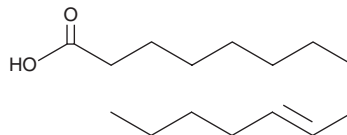
# PRODUCT INFORMATION



## 10(E)-Pentadecenoic Acid

Item No. 22467

**CAS Registry No.:** 321744-58-5  
**Formal Name:** 10E-pentadecenoic acid  
**Synonym:** FA 15:1  
**MF:** C<sub>15</sub>H<sub>28</sub>O<sub>2</sub>  
**FW:** 240.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 230 nm  
**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

10(E)-Pentadecenoic 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 DMSO and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of 10(E)-pentadecenoic acid in these solvents is approximately 10 and 25 mg/ml, respectively.

10(E)-Pentadecenoic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 10(E)-pentadecenoic acid should be diluted with the aqueous buffer of choice. 10(E)-Pentadecenoic acid has a solubility of approximately 0.25 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method.

### Description

10(E)-Pentadecenoic acid is a 15-carbon, long-chain monounsaturated fatty acid. It inhibits IFN-γ-induced production of kynurenine in THP-1 cells by 14% when used at a concentration of 20 μM.<sup>1</sup> 10(E)-Pentadecenoic acid has been used in studies of alternative β-oxidation pathways.<sup>2,3</sup>

### References

1. Costabile, M., Bassal, N.K., Gerber, J.P., *et al.* Inhibition of indoleamine 2,3-dioxygenase activity by fatty acids and prostaglandins: A structure function analysis. *Prostaglandins Leukot. Essent. Fatty Acids* **122**, 7-15 (2017).
2. Robert, J., Marchesini, S., Delessert, S., *et al.* Analysis of the β-oxidation of *trans*-unsaturated fatty acid in recombinant *Saccharomyces cerevisiae* expressing a peroxisomal PHA synthase reveals the involvement of a reductase-dependent pathway. *Biochim Biophys. Acta.* **1734(2)**, 169-177 (2005).
3. Allenbach, L. and Poirier, Y. Analysis of the alternative pathways for the β-oxidation of unsaturated fatty acids using transgenic plants synthesizing polyhydroxyalkanoates in peroxisomes. *Plant Physiol.* **124(3)**, 1159-1168 (2000).

#### 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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#### 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