

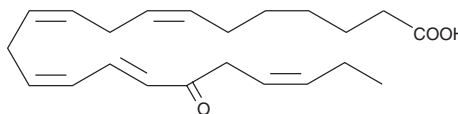
# PRODUCT INFORMATION



## 17-oxo-7(Z),10(Z),13(Z),15(E),19(Z)-Docosapentaenoic Acid

Item No. 9000347

**CAS Registry No.:** 1233715-33-7  
**Formal Name:** 7Z,10Z,13Z,15E,19Z-17-oxo-docosapentaenoic acid  
**Synonyms:** EFOX, 17-oxo-DPA, 17-oxo-7(Z),10(Z),13(Z),15(E),19(Z)-DPA,  
**MF:** C<sub>22</sub>H<sub>32</sub>O<sub>3</sub>  
**FW:** 344.5  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 282 nm  
**Supplied as:** A solution in ethanol  
**Storage:** -80°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

17-oxo-7(Z),10(Z),13(Z),15(E),19(Z)-DHA (17-oxo-DPA) is supplied as a solution in ethanol. To change the solvent, simply evaporate the 17-oxo-DPA 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 17-oxo-DPA in these solvents is approximately 20, 10, and 15 mg/ml, respectively.

### Description

Docosapentaenoic acid (DPA) is a ω-3 fatty acid found in fish oils. 17-oxo-DPA is a metabolite of lipoxygenase-mediated oxidation of DPA that is produced endogenously by aspirin-enhanced COX-2 activity.<sup>1,2</sup> It has been shown to activate Nrf2-dependent antioxidant gene expression, to act as a PPARγ agonist (EC<sub>50</sub> = ~200 nM), and to inhibit pro-inflammatory cytokine and nitric oxide production at biological concentration ranges (5-25 μM).<sup>2</sup>

### References

1. Lie Ken Jie, M.S.F. and Pasha, M.K. Fatty acids, fatty acid analogues and their derivatives. *Nat. Prod. Rep.* 607-629 (1998).
2. Groeger, A.L., Cipollina, C., Cole, M.P., et al. Cyclooxygenase-2 generates anti-inflammatory mediators from omega-3 fatty acids. *Nat. Chem. Biol.* (2010).

#### 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