

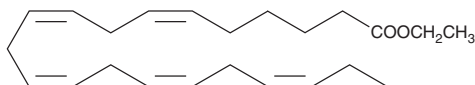
# PRODUCT INFORMATION



## Heneicosapentaenoic Acid ethyl ester

Item No. 9002624

**CAS Registry No.:** 131775-86-5  
**Formal Name:** 6Z,9Z,12Z,15Z,18Z-heneicosapentaenoic acid, ethyl ester  
**Synonym:** HPA ethyl ester  
**MF:** C<sub>23</sub>H<sub>36</sub>O<sub>2</sub>  
**FW:** 344.5  
**Purity:** ≥98%  
**Stability:** ≥1 year at -20°C  
**Supplied as:** A solution in ethanol



### Laboratory Procedures

For long term storage, we suggest that heneicosapentaenoic acid (HPA) ethyl ester be stored as supplied at -20°C. It should be stable for at least one year.

HPA ethyl ester is supplied as a solution in ethanol. To change the solvent, simply evaporate the HPA ethyl ester 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 HPA ethyl ester in these solvents is approximately 100 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 HPA ethyl ester is needed, it can be prepared by evaporating the HPA ethyl ester and directly dissolving the neat oil in aqueous buffers. The solubility of HPA ethyl ester in PBS, pH 7.2, is approximately 100 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

HPA (Item No. 10670) is a 21:5 ω-3 fatty acid present in trace amounts in green algae and in fish oils. Its chemical composition is similar to eicosapentaenoic acid (EPA; Item No. 90110) except elongated with one carbon on the carboxyl end, placing the first double bond in the Δ<sup>6</sup> position.<sup>1</sup> HPA can be used to study the significance of the position of the double bonds in n-3 fatty acids. It incorporates into phospholipids and into triacylglycerol *in vivo* with the same efficiency as EPA and docosahexaenoic acid (DHA; Item No. 90310) and exhibits strong inhibition of arachidonic acid (Item No. 90010) synthesis from linoleic acid (Item No. 90150).<sup>1</sup> HPA ethyl ester is a more lipophilic, stabilized form of the free acid.

### Reference

1. Larsen, L.N., Hovik, K., Bremer, J., *et al.* Heneicosapentaenoate (21:5n-3): Its incorporation into lipids and its effects on arachidonic acid and eicosanoid synthesis. *Lipids* **32**, 707-714 (1997).

#### 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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