

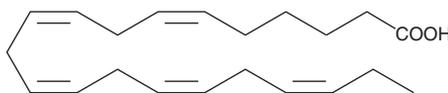
PRODUCT INFORMATION



Heneicosapentaenoic Acid

Item No. 10670

CAS Registry No.: 24257-10-1
Formal Name: 6Z,9Z,12Z,15Z,18Z-heneicosapentaenoic acid
Synonyms: FA 21:5, HPA
MF: $C_{21}H_{32}O_2$
FW: 316.5
Purity: $\geq 95\%$
Supplied as: A solution in ethanol
Storage: $-20^{\circ}C$
Stability: ≥ 2 years



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

Laboratory Procedures

Heneicosapentaenoic acid (HPA) 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 purged with an inert gas can be used. The solubility of HPA in these solvents is approximately 100 mg/ml.

HPA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of HPA should be diluted with the aqueous buffer of choice. The solubility of HPA in PBS (pH 7.2) and 0.15 M Tris-HCl (pH 8.5) is approximately 0.1 and 1 mg/ml, respectively. We do not recommend storing the aqueous solution for more than one day.

Description

HPA is a 21:5 ω -3 fatty acid present in trace amounts in the green alga *B. pennata* and in fish oils. Its chemical composition is similar to eicosapentaenoic acid (EPA) except elongated with one carbon on the carboxyl end, placing the first double bond in the Δ^6 position.¹ HPA can be used to study the significance of the position of the double bonds in ω -3 fatty acids. It incorporates into phospholipids and into triacylglycerol *in vivo* with the same efficiency as EPA and docosahexaenoic acid and exhibits strong inhibition of arachidonic acid synthesis from linoleic acid.¹ HPA is a poor substrate for prostaglandin H synthase (PGHS) (cyclooxygenase) and for 5-lipoxygenase but retains the ability to rapidly inactivate PGHS.¹

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(7)**, 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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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