

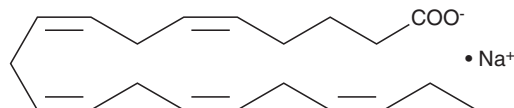
PRODUCT INFORMATION



Eicosapentaenoic Acid (sodium salt)

Item No. 21908

CAS Registry No.: 73167-03-0
Formal Name: 5Z,8Z,11Z,14Z,17Z-eicosapentaenoic acid, monosodium salt
Synonyms: EPA, FA 20:5, Timnodonic Acid
MF: $C_{20}H_{29}O_2 \cdot Na$
FW: 324.4
Purity: $\geq 95\%$
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

Eicosapentaenoic acid (EPA) (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the EPA (sodium salt) in the solvent of choice, which should be purged with an inert gas. EPA (sodium salt) is soluble in the organic solvent ethanol at a concentration of approximately 1.5 mg/ml.

EPA (sodium salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, EPA (sodium salt) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. EPA (sodium salt) has a solubility of approximately 0.5 mg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

EPA is an ω -3 fatty acid abundantly available in marine organisms. It is oxygenated by COX-1 and COX-2 at rates of approximately 5% and 30%, respectively, compared to arachidonic acid (Item No. 90010).¹ EPA has been shown to offer protection against coronary heart disease, thrombosis, ischemic brain injury, scaly dermatitis, and some inflammatory diseases.^{2,3}

References

1. Wada, M., DeLong, C.J., Hong, Y.H., *et al.* Enzymes and receptors of prostaglandin pathways with arachidonic acid-derived versus eicosapentaenoic acid-derived substrates and products. *J. Biol. Chem.* **282(31)**, 22254-22266 (2007).
2. Yerram, N.R., Moore, S.A., and Spector, A.A. Eicosapentaenoic acid metabolism in brain microvessel endothelium: Effect on prostaglandin formation. *J. Lipid Res.* **30(11)**, 1747-1757 (1989).
3. Takeuchi, H., Inoue, J., Yoshida, M., *et al.* Dietary effects of n-3 eicosapentaenoic acid on essential fatty acid-deficiency symptoms of rats. *Agric. Biol. Chem.* **53(12)**, 3225-3232 (1989).

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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