

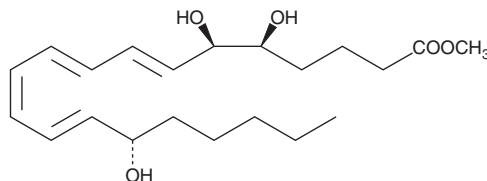
PRODUCT INFORMATION



Lipoxin A₄ methyl ester

Item No. 10033

CAS Registry No.: 97643-35-1
Formal Name: 5S,6R,15S-trihydroxy-7E,9E,11Z,13E-eicosatetraenoic acid, methyl ester
Synonyms: LXA₄ methyl ester, 5(S),6(R),15(S)-TriHETE methyl ester
MF: C₂₁H₃₄O₅
FW: 366.5
Purity: ≥95%
UV/Vis.: λ_{max}: 302 nm ε: 50,000
Supplied as: A solution in ethanol
Storage: -80°C
Stability: ≥1 year
Special Conditions: Light Sensitive



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

Laboratory Procedures

Lipoxin A₄ (LXA₄) methyl ester 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. LXA₄ methyl ester is soluble in the organic solvent dimethyl formamide at a concentration of approximately 50 mg/ml.

LXA₄ methyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of LXA₄ methyl ester should be diluted with the aqueous buffer of choice. The solubility of LXA₄ methyl ester in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

LXA₄ methyl ester is a more lipid soluble, prodrug formulation of the transcellular metabolite LXA₄. LXA₄ is a trihydroxy fatty acid containing a conjugated tetraene, produced by the metabolism of 15-HETE or 15-HpETE with human leukocytes.¹ LXA₄ is equipotent to leukotriene B₄ (LTB₄) in inducing superoxide generation in human neutrophils at 0.1 μM.² LXA₄ is associated with several other biological functions including leukocyte activation, chemotaxis effects, natural killer cell inhibition, and monocyte migration and adhesion.²⁻⁴

References

1. Serhan, C.N., Nicolaou, K.C., Webber, S.E., *et al.* Lipoxin A. Stereochemistry and biosynthesis. *J. Biol. Chem.* **261(35)**, 16340-16345 (1986).
2. Serhan, C.N., Hamberg, M., and Samuelsson, B. Lipoxins: Novel series of biologically active compounds formed from arachidonic acid in human leukocytes. *Proc. Natl. Acad. Sci. USA* **81(17)**, 5335-5339 (1984).
3. Ramstedt, U., Serhan, C.N., Nicolaou, K.C., *et al.* Lipoxin A-induced inhibition of human natural killer cell cytotoxicity: Studies on stereospecificity of inhibition and mode of action. *J. Immunol.* **138(1)**, 266-270 (1987).
4. Maddox, J.F. and Serhan, C.N. Lipoxin A₄ and B₄ are potent stimuli for human monocyte migration and adhesion: Selective inactivation by dehydrogenation and reduction. *J. Exp. Med.* **183(1)**, 137-146 (1996).

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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