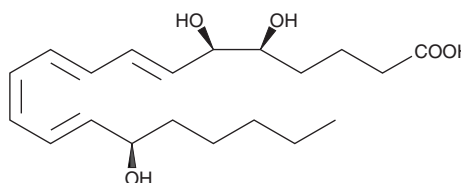


PRODUCT INFORMATION

15(R)-Lipoxin A₄

Item No. 90415

CAS Registry No.: 171030-11-8
Formal Name: 5(S),6(R),15(R)-trihydroxy-7E,9E,11Z,13E-eicosatetraenoic acid
Synonyms: AT-Lipoxin A₄, 15-*epi* Lipoxin A₄, 15(R)-LXA₄
MF: C₂₀H₃₂O₅
FW: 352.5
Purity: ≥95%
UV/Vis.: λ_{max}: 302 nm
Supplied as: A solution in ethanol
Storage: -80°C
Stability: ≥1 year



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

Laboratory Procedures

15(R)-Lipoxin A₄ (15(R)-LXA₄) 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 dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of 15(R)-LXA₄ in DMF is approximately 50 mg/ml.

15(R)-LXA₄ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanol solution of 15(R)-LXA₄ should be diluted with the aqueous buffer of choice. The solubility of 15(R)-LXA₄ in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Lipid-derived lipoxins are produced at the site of vascular and mucosal inflammation where they down-regulate polymorphonuclear leukocyte recruitment and function. 15(R)-LXA₄ is derived from the aspirin-triggered formation of 15(R)-HETE (Item No. 34710) from arachidonic acid (Item No. 90010).^{1,2} 15(R)-LXA₄ inhibits LTB₄-induced chemotaxis, adherence, and transmigration of neutrophils with twice the potency of LXA₄ (Item No. 90410) demonstrating activity in the nM range.^{1,3} The anti-inflammatory effects of aspirin may be ascribed in part to the ability of 15(R)-LXA₄ to regulate leukocyte function.⁴ 15(R)-LXA₄ is reported to promote resolution of inflammation in LPS-treated stromal cells derived from intermediate-stage diseased supraspinatus tendons as evidenced by increased expression of the STAT-6 pathway target genes, ALOX15 and CD206.⁵

References

- Clària, J., Lee, M.H., and Serhan, C.N. *Mol. Med.* **2**(5), 583-596 (1996).
- Clària, J. and Serhan, C.N. *Proc. Natl. Acad. Sci. USA* **92**(21), 9475-9479 (1995).
- Fierro, I.M., Colgan, S.P., Bernasconi, G., et al. *J. Immunol.* **170**(5), 2688-2694 (2003).
- Chiang, N., Bermudez, E.A., Ridker, P.M., et al. *Proc. Natl. Acad. Sci. USA* **101**(42), 15178-15183 (2004).
- Dakin, S.G., Martinez, F.O., Yapp, C., et al. *Sci. Transl. Med.* **7**(311), (2015).

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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