

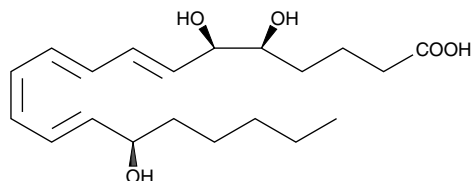
# Product Information



## 5(S),6(R),15(R)-Lipoxin A<sub>4</sub>

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 A<sub>4</sub>, 15-*epi* Lipoxin A<sub>4</sub>, 5(S),6(R),15(R)-LXA<sub>4</sub>  
**MF:** C<sub>20</sub>H<sub>32</sub>O<sub>5</sub>  
**FW:** 352.5  
**Purity:** ≥95%  
**Stability:** ≥1 year at -80°C  
**Supplied as:** A solution in ethanol  
**UV/Vis.:** λ<sub>max</sub>: 302 nm ε: 50,000  
**Miscellaneous:** Light Sensitive



### Laboratory Procedures

For long term storage, we suggest that 5(S),6(R),15(R)-lipoxin A<sub>4</sub> (5(S),6(R),15(R)-LXA<sub>4</sub>) be stored as supplied at -80°C. It should be stable for at least one year.

5(S),6(R),15(R)-LXA<sub>4</sub> 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. It is recommended that this product be stored and handled in an ethanol solution. Lipoxins can isomerize and degrade when put into freeze thaw conditions and/or in solvents such as DMF or DMSO. If diluted with an aqueous buffer, this product should be discarded immediately after use.

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 5(S),6(R),15(R)-LXA<sub>4</sub> is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 5(S),6(R),15(R)-LXA<sub>4</sub> in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Lipid-derived lipoxins are produced at the site of vascular and mucosal inflammation where they down-regulate polymorphonuclear leukocyte recruitment and function. 5(S),6(R),15(R)-LXA<sub>4</sub> is derived from the aspirin-triggered formation of 15(R)-HETE from arachidonic acid.<sup>1,2</sup> 5(S),6(R),15(R)-LXA<sub>4</sub> inhibits LTB<sub>4</sub>-induced chemotaxis, adherence, and transmigration of neutrophils with twice the potency of LXA<sub>4</sub> demonstrating activity in the nM range.<sup>2,3</sup> The anti-inflammatory effects of aspirin may be ascribed in part to the ability of 5(S),6(R),15(R)-LXA<sub>4</sub> to regulate leukocyte function.<sup>4</sup>

### References

1. Clària, J., Lee, M.H., and Serhan, C.N. *Mol. Med.* **2**, 583-596 (1996).
2. Clària, J. and Serhan, C.N. *Proc. Natl. Acad. Sci. USA* **92**, 9475-9479 (1995).
3. Fierro, I.M., Colgan, S.P., Bernasconi, G., et al. *J. Immunol.* **170**, 2688-2694 (2003).
4. Chiang, N., Bermudez, E.A., Ridker, P.M., et al. *Proc. Natl. Acad. Sci. USA* **101**(42), 15178-15183 (2004).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/90415](http://www.caymanchem.com/catalog/90415)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's exclusive remedy and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

Copyright Cayman Chemical Company, 05/22/2013

### Cayman Chemical

#### Mailing address

1180 E. Ellsworth Road  
Ann Arbor, MI  
48108 USA

#### Phone

(800) 364-9897  
(734) 971-3335

#### Fax

(734) 971-3640

#### E-Mail

[custserv@caymanchem.com](mailto:custserv@caymanchem.com)

#### Web

[www.caymanchem.com](http://www.caymanchem.com)