

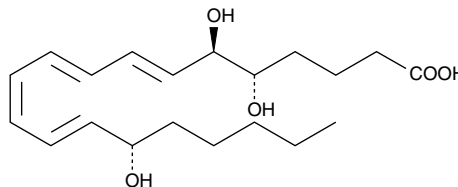
# Product Information



## 5(S),6(R)-Lipoxin A<sub>4</sub> Lipid Maps MS Standard

Item No. 10007271

**CAS Registry No.:** 89663-86-5  
**Formal Name:** 5S,6R,15S-trihydroxy-7E,9E,11Z,13E-eicosatetraenoic acid  
**Synonyms:** 5(S),6(R),15(S)-TriHETE, 5(S),6(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  
**Miscellaneous:** Light Sensitive



### Laboratory Procedures

For long term storage, we suggest that 5(S),6(R)-lipoxin A<sub>4</sub> (5(S),6(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)-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. Solvents such as DMSO and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of 5(S),6(R)-LXA<sub>4</sub> in these solvents is at least 50 mg/ml. We strongly recommend that solvent changes occur immediately before use, as 5(S),6(R)-LXA<sub>4</sub> will degrade over time in DMSO and DMF.

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)-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)-LXA<sub>4</sub> in PBS (pH 7.2) is at least 1 mg/ml. Store aqueous solutions of 5(S),6(R)-LXA<sub>4</sub> on ice and use within 12 hours of preparation. Although the aqueous solutions of 5(S),6(R)-LXA<sub>4</sub> may be stable for more than 12 hours, we strongly recommend using a fresh preparation each day.

5(S),6(R)-LXA<sub>4</sub> is a trihydroxy fatty acid containing a conjugated tetraene, produced by the metabolism of 15-HETE or 15-HpETE with human leukocytes.<sup>1</sup> 5(S),6(R)-LXA<sub>4</sub> is equipotent to leukotriene B<sub>4</sub> (LTB<sub>4</sub>) in inducing superoxide generation in human neutrophils at 0.1 μM.<sup>2</sup> 5(S),6(R)-LXA<sub>4</sub> is associated with several other biological functions including leukocyte activation, chemotaxis effects, natural killer cell inhibition, and monocyte migration and adhesion.<sup>2-4</sup>

### References

1. Serhan, C.N., Nicolaou, K.C., Webber, S.E., *et al.* Lipoxin A. Stereochemistry and biosynthesis. *J. Biol. Chem.* **261**, 16340-16345 (1986).
2. Serhan, C.N., Hamberg, M., Samuelsson, B. Lipoxins: Novel series of biologically active compounds formed from arachidonic acid in human leukocytes. *Proc. Natl. Acad. Sci. USA* **81**, 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**, 266-270 (1987).
4. Maddox, J.F. and Serhan, C.N. Lipoxin A<sub>4</sub> and B<sub>4</sub> are potent stimuli for human monocyte migration and adhesion: Selective inactivation by dehydrogenation and reduction. *J. Exp. Med.* **183**, 137-146 (1996).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/10007271](http://www.caymanchem.com/catalog/10007271)

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

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