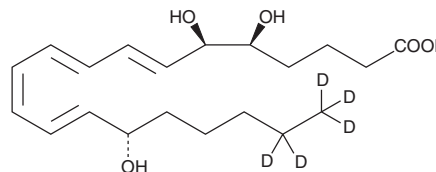


# PRODUCT INFORMATION



## Lipoxin A<sub>4</sub>-d<sub>5</sub> Item No. 10007737

**CAS Registry No.:** 1622429-53-1  
**Formal Name:** 5S,6R,15S-trihydroxyicosa-7E,9E,11Z,13E-tetraenoic-19,19,20,20,20-d<sub>5</sub> acid  
**Synonyms:** LXA<sub>4</sub>-d<sub>5</sub>, 5(S),6(R),15(S)-TriHETE-d<sub>5</sub>  
**MF:** C<sub>20</sub>H<sub>27</sub>D<sub>5</sub>O<sub>5</sub>  
**FW:** 357.5  
**Chemical Purity:** ≥95% Lipoxin A<sub>4</sub>  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>5</sub>); ≤1% d<sub>0</sub>  
**UV/Vis.:** λ<sub>max</sub>: 302 nm ε: 50,000  
**Supplied as:** A solution in ethanol  
**Storage:** -80°C  
**Stability:** As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly  
**Special Conditions:** Light Sensitive



### Laboratory Procedures

Lipoxin A<sub>4</sub>-d<sub>5</sub> (LXA<sub>4</sub>-d<sub>5</sub>) contains five deuterium atoms at the 19, 19', 20, 20, and 20 positions. It is intended for use as an internal standard for the quantification of LXA<sub>4</sub> by GC- or LC-mass spectrometry (MS).

LXA<sub>4</sub>-d<sub>5</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.

LXA<sub>4</sub>-d<sub>5</sub> is used as an internal standard for the quantification of LXA<sub>4</sub> by stable isotope dilution MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

### Description

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> 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> 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.* *J. Biol. Chem.* **261**, 16340-16345 (1986).
2. Serhan, C.N., Hamberg, M., and Samuelsson, B. *Proc. Natl. Acad. Sci. USA* **81**, 5335-5339 (1984).
3. Ramstedt, U., Serhan, C.N., Nicolaou, K.C., *et al.* *J. Immunol.* **138**, 266-270 (1987).
4. Maddox, J.F. and Serhan, C.N. *J. Exp. Med.* **183**, 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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