

# PRODUCT INFORMATION



## Lipoxin MaxSpec® LC-MS Mixture Item No. 19412

**Supplied as:** A solution in ethanol (100 ng/ml of each compound)  
**Fill volume:** >1 ml  
**Storage:** -80°C  
**Stability:** ≥5 years

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

### Description

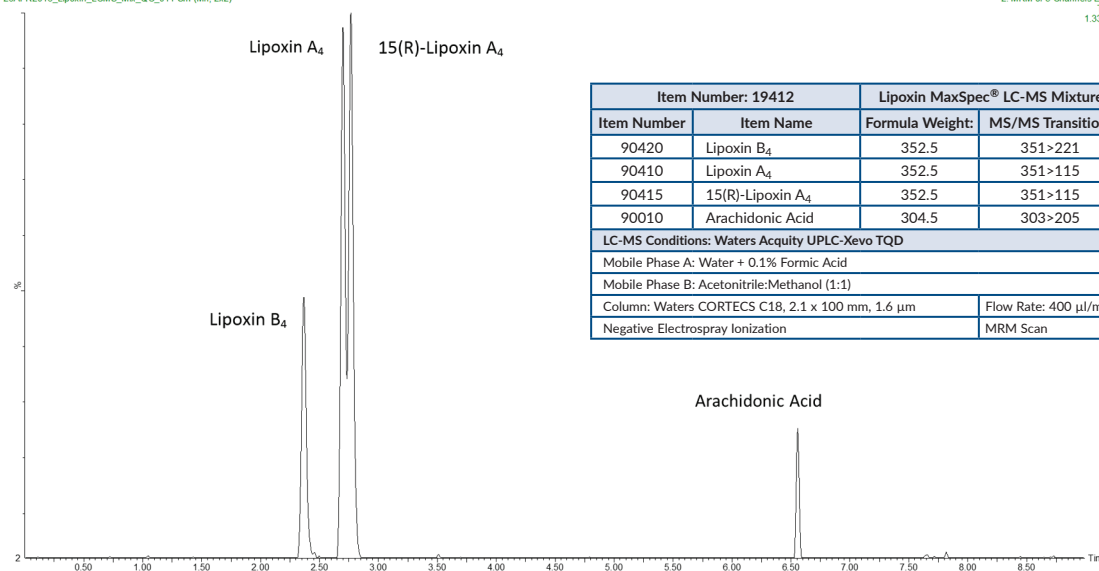
This mixture contains several lipoxins and their precursor, arachidonic acid (Item No. 90010). The mixture is supplied in an amber ampule in which the headspace has been purged with argon to prevent lipid oxidation. This product has been designed for direct use in LC-MS applications. The solution may be serially diluted for preparation of calibrators and QC standards and/or used directly as a system suitability standard or tuning standard. After opening, we recommend that the mixture be transferred immediately to a 1 ml glass screw cap vial, to prevent solvent evaporation, and stored at -80°C. The mixture should be discarded after multiple freeze/thaw cycles.

The fatty acids in this mixture represent the metabolic cascade of the lipoxins, a family of lipid mediators that are generated at the site of vascular and mucosal inflammation where they down-regulate polymorphonuclear leukocyte recruitment and function.<sup>1-3</sup> Lipoxins are produced by human leukocytes *via* the oxygenation of arachidonic acid by either 15- or 5-lipoxygenase, which forms 15-HETE or 5-HETE intermediates before subsequent metabolism to lipoxin A<sub>4</sub> (Item No. 90410) and B<sub>4</sub> (Item No. 90420).<sup>1,5,6</sup> 15(R)-Lipoxin A<sub>4</sub> (Item No. 90415) is derived from the aspirin-triggered formation of 15(R)-HETE (Item No. 34710) from arachidonic acid.<sup>7,8</sup>

### Contents

Lipoxin LCMS Mix Fresh from -80°C Lipoxin LCMS Mix Fresh from -80°C  
26APR2016\_Lipoxin\_LCMS\_Mix\_QC\_011 Sm (Mn, 2x2)

2 MRM of 5 Channels ES-  
TIC  
1.03e4



#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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## References

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1. 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).
2. 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).
3. 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(1)**, 137-146 (1996).
4. Papayianni, A., Serhan, C.N., and Brady, H.R. Lipoxin A<sub>4</sub> and B<sub>4</sub> inhibit leukotriene-stimulated interactions of human neutrophils and endothelial cells. *J. Immunol.* **156(6)**, 2264-2272 (1996).
5. Serhan, C.N., Nicolaou, K.C., Webber, S.E., *et al.* Lipoxin A. Stereochemistry and biosynthesis. *J. Biol. Chem.* **261(35)**, 16340-16345 (1986).
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