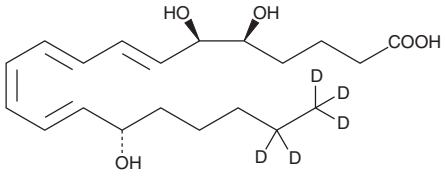
PRODUCT INFORMATION

Lipoxin A_4-d_5

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_5 acid
Synonyms: LXA_4-d_5, 5(S),6(R),15(S)-TriHETE-d_5
MF: $C_{20}H_{27}D_5O_5$
FW: 357.5
Chemical Purity: ≥95% Lipoxin A_4
Deuterium Incorporation: ≥99% deuterated forms (d_1-d_5); ≤1% d_0
UV/Vis.: λ_{max}: 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_4-d_5 (LXA_4-d_5) 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_4 by GC- or LC-mass spectrometry (MS).

LXA_4-d_5 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_4-d_5 is used as an internal standard for the quantification of LXA_4 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_4 is a trihydroxy fatty acid containing a conjugated tetraene, produced by the metabolism of 15-HETE or 15-HpETE with human leukocytes.[1] LXA_4 is equipotent to leukotriene B_4 (LTB_4) in inducing superoxide generation in human neutrophils at 0.1 µM.[2] LXA_4 is associated with several other biological functions including leukocyte activation, chemotaxis effects, natural killer cell inhibition, and monocyte migration and adhesion.[2-4]

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).

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