PRODUCT INFORMATION



6-trans-12-epi Leukotriene B

Item No. 35265

CAS Registry No.: 71548-19-1

Formal Name: 5S,12S-dihydroxy-6E,8E,10E,14Z-

eicosatetraenoic acid

Synonym: 6-trans-12-epi LTB₁

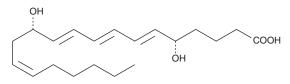
MF: $C_{20}H_{32}O_4$ FW: 336.5 ≥97% **Purity:**

UV/Vis.: λ_{max} : 268 nm ϵ : 50,000 nm

Supplied as: A solution in ethanol

Storage: Stability: ≥1 year Special Conditions: Light sensitive

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



Laboratory Procedures

6-trans-12-epi Leukotriene B₄ (6-trans-12-epi LTB₄) 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 purged with an inert gas can be used. The solubility of 6-trans-12-epi LTB₄ in these solvents is approximately 50 mg/ml.

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 6-trans-12-epi LTB_{$_{A}$} is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 6-trans-12-epi LTB $_4$ in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

6-trans-12-epi LTB4 is a non-enzymatic hydrolysis product of LTA4. It was originally isolated from glycogen-induced rabbit peritoneal polymorphonuclear leukocytes (PMNL). 1,2 6-trans-12-epi LTB₄ is weakly chemotactic for PMNL, with approximately 20 times less potency than LTB4, and has no effect on the aggregation response.3

References

- 1. Borgeat, P. and Samuelsson, B. Metabolism of arachidonic acid in polymorphonuclear leukocytes. J. Biol. Chem. 254(16), 7865-7869 (1979).
- 2. Borgeat, P. and Samuelsson, B. Arachidonic acid metabolism in polymorphonuclear leukocytes: Unstable intermediate in formation of dihydroxy acids. Proc. Natl. Acad. Sci. USA 76(7), 3213-3217 (1979).
- 3. Lee, T.H., Mencia-Huerta, J.M., Shih, C., et al. Characterization and biologic properties of 5,12-dihydroxy derivatives of eicosapentaenoic acid, including leukotriene B₅ and the double lipoxygenase product. J. Biol. Chem. 259(4), 2383-2389 (1984).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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