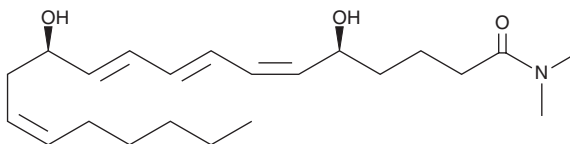


PRODUCT INFORMATION



Leukotriene B₄ dimethyl amide Item No. 20115

CAS Registry No.: 83024-92-4
Formal Name: N,N-dimethyl-5S,12R-dihydroxy-6Z,8E,10E,14Z-eicosatetraenamide
MF: C₂₂H₃₇NO₃
FW: 363.5
Purity: ≥97%
UV/Vis.: λ_{max}: 270 nm ε: 50,000
Supplied as: A solution in methanol
Storage: -20°C
Stability: ≥2 years
Special Conditions: Light Sensitive



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

Laboratory Procedures

Leukotriene B₄ dimethyl amide (LTB₄ dimethyl amide) is supplied as a solution in methanol. To change the solvent, simply evaporate the methanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of LTB₄ dimethyl amide 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 LTB₄ dimethyl amide is needed, it can be prepared by evaporating the methanol and directly dissolving the neat oil in aqueous buffers. The solubility of LTB₄ dimethyl amide in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

LTB₄ dimethyl amide is a moderate inhibitor of LTB₄-induced degranulation of human neutrophils (K_i = 130 nM) and lysozyme release from rat PMNL.¹⁻³ LTB₄ dimethyl amide appears to be an antagonist of the LTB₄ receptor on guinea pig lung membranes.³

References

1. Showell, H.J., Otterness, I.G., Marfat, A., *et al.* Inhibition of leukotriene B₄-induced neutrophil degranulation by leukotriene B₄-dimethylamide. *Biochem. Biophys. Res. Commun.* **106**, 741-747 (1982).
2. Shimazaki, T., Kobayashi, Y., Sato, F., *et al.* Some newly synthesized leukotriene B₄ analogs inhibit LTB₄-induced lysozyme release from rat polymorphonuclear leukocytes. *Prostaglandins* **39**, 459-467 (1990).
3. Falcone, R.C. and Aharony, D. Modulation of ligand binding to leukotriene B₄ receptors on guinea pig lung membranes by sulfhydryl modifying reagents. *J. Pharmacol. Exp. Ther.* **255**, 565-571 (1990).

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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