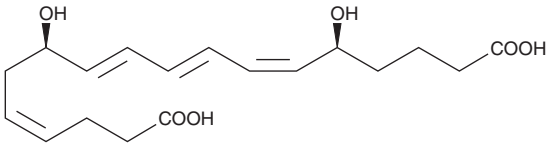
PRODUCT INFORMATION

18-carboxy dinor Leukotriene B_4

Item No. 20170

CAS Registry No.: 102674-12-4
Formal Name: 7R,14S-dihydroxy-4Z,8E,10E,12Z-octadecatetraenedioic acid
Synonym: 18-carboxy dinor LTB_4
MF: $C_{18}H_{26}O_6$
FW: 338.4
Purity: ≥97%
UV/Vis.: λ_{max}: 270 nm
Supplied as: A solution in ethanol
Storage: -20°C
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

18-carboxy dinor LTB_4 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 18-carboxy dinor LTB_4 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 18-carboxy dinor LTB_4 is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 18-carboxy dinor 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

18-carboxy dinor LTB_4 is a b-oxidation metabolite of LTB_4.[1] In the liver, LTB_4 is rapidly metabolized to 20-carboxy LTB_4, which then undergoes b-oxidation to 18-carboxy dinor LTB_4.[2]

References

1. Harper, T.W., Garrity, M.J., and Murphy, R.C. Metabolism of leukotriene B_4 in isolated rat hepatocytes. Identification of a novel 18-carboxy-19,20-dinor leukotriene B_4 metabolite. *J. Biol. Chem.* **261**, 5414-5418 (1986).
2. Shirley, M.A. and Murphy, R.C. Metabolism of leukotriene B_4 in isolated rat hepatocytes. Involvement of 2,4-dienoyl-coenzyme a reductase in leukotriene B_4 metabolism. *J. Biol. Chem.* **265**, 16288-16295 (1990).

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