

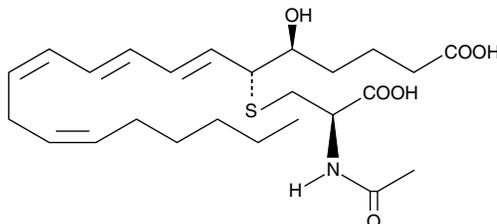
Product Information



N-acetyl Leukotriene E₄

Item No. 20420

CAS Registry No.: 80115-95-3
Formal Name: 7,9,11,14-Eicosatetraenoic acid, 6-[[2-(acetylamino)-2-carboxyethyl thio]-5-hydroxy-, [5S-[5R*,6S*(S*),7E,9E,11Z,14Z]]-
MF: C₂₅H₃₉NO₆S
FW: 481.6
Purity: ≥97%
Stability: ≥1 year at -80°C
Supplied as: A solution in ethanol
UV/Vis: λ_{max}: 281 nm ε: 40,000
Misc: Oxygen and light sensitive



Laboratory Procedures

For long term storage, we suggest that N-acetyl leukotriene E₄ (N-acetyl LTE₄) be stored as supplied at -20°C. It should be stable for at least one year.

N-acetyl LTE₄ 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, dimethyl formamide, or acetonitrile purged with an inert gas or nitrogen can be used. Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Be certain that your buffers are free of oxygen, transition metal ions, and redox active compounds. Also, ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations.

It is difficult to obtain aqueous solutions of N-acetyl LTE₄ directly. However, an organic solvent-free solution of N-acetyl LTE₄ can be prepared using basic concentrated buffers (pH > 8.0 and ionic strength ≥ 0.1M). Add 400μl of cold buffer (0°C) per mg of N-acetyl LTE₄ and agitate vigorously and/or ultrasonicate. We do not recommend storing the aqueous solution for more than one day.

It has been shown that the acetylation of LTE₄ has a detoxification effect. N-acetyl LTE₄ is 100 times less potent than LTC₄ and LTE₄ as a vasoconstricting agent.¹ In other studies, N-acetyl LTE₄ was used as an indicator of blood plasma leukotrienes. It was shown that cysteinyl leukotrienes are rapidly removed from the blood into bile where N-acetyl LTE₄ was the major metabolite.²

References

1. Foster, A., Fitzsimmons, B., and Letts, L.G. The synthesis of N-acetyl-leukotriene E₄ and its effects on cardiovascular and respiratory function of the anesthetized pig. *Prostaglandins* 31, 1077-1086 (1986).
2. Denzlinger, C., Rapp, S., Hagmann, W., *et al.* Leukotrienes as mediators in tissue trauma. *Science* 230, 330-332 (1985).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/20420

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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