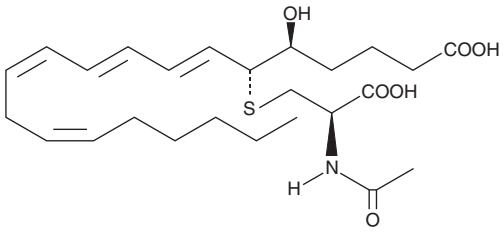
PRODUCT INFORMATION

N-acetyl Leukotriene E_4

Item No. 20420

CAS Registry No.: 80115-95-3
Formal Name: 5S-hydroxy-6R-(S-(N-acetyl) cysteinyl)-7E,9E,11Z,14Z-eicosatetraenoic acid
Synonym: N-acetyl LTE_4
MF: $C_{25}H_{39}NO_6S$
FW: 481.6
Purity: ≥97%
UV/Vis.: λ_{max}: 281 nm
Supplied as: A 100 µg/ml solution in ethanol
Storage: -80°C
Stability: ≥1 year
Special Conditions: Oxygen and light sensitive



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

Laboratory Procedures

N-acetyl LTE_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, 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 LTE_4 directly. However, an organic solvent-free solution of N-acetyl LTE_4 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 LTE_4 and agitate vigorously and/or ultrasonicate. We do not recommend storing the aqueous solution for more than one day.

Description

N-acetyl LTE_4 is the major inactive metabolite of LTE_4 found in bile. This route of metabolism is prominent in the rat, but of minor importance in humans.[1,2] N-acetyl LTE_4 is 100 times less potent than LTC_4 as a vasoconstricting agent.[2] In healthy human subjects urinary excretion of N-acetyl LTE_4 is about 1.5 nmol/mol creatinine, which is considerably less than that of LTE_4 (12 nmol/mol creatinine).[3]

References

1. Denzlinger, C., Rapp, S., Hagmann, W., *et al.* Leukotrienes as mediators in tissue trauma. *Science* **230(4723),** 330-332 (1985).
2. Foster, A., Fitzsimmons, B., and Letts, L.G. The synthesis of N-acetyl-leukotriene E_4 and its effects on cardiovascular and respiratory function of the anesthetized pig. *Prostaglandins* **31(6),** 1077-1086 (1986).
3. Huber, M., Müller, J., Leier, I., *et al.* Metabolism of cysteinyl leukotrienes in monkey and man. *Eur. J. Biochem.* **194(1),** 309-315 (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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