Creative Enzymes®

LTA4 (Leukotriene A4 methyl ester)

Cat. No. CSUB-0864

Lot. No. (See product label)

Introduction

Description LTA4 (Leukotriene A4 methyl ester) is a member of the leukotriene family of endogenous metabolites of certain fatty acids and are related to thromboxanes and prostaglandins. They are potent eicosanoid lipid mediators that play numerous roles in inflammation, immunological functions and maintaining biological homeostasis. Leukotrienes possess a conjugated triene structure which gives them their name. They are generally isolated from leukocytes and primarily act through specific G protein-coupled receptors. Leukotriene A4 methyl ester is an unstable intermediate in the biosynthesis of LTB4 and LTC4. Observations show that the naturally occuring free acid is a substrate for LTA4H (LTA4 hydrolase) and LTC4 synthase and plays a central role in transcellular leukotriene and lipoxin biosynthesis. It has also been shown to mobilize Ca2+ in human neutrophils. This product is supplied as the methyl ester for higher stability.

Applications An unstable intermediate in the biosynthesis of LTB4 and LTC4

Synonyms (-)-LEUKOTRIENE A4 METHYL ESTER; LEUKOTRIENE A4 METHYL ESTER; 5S-TRANS-5,6-OXIDO-7E,9E,11Z,14Z-EICOSATETRAENOIC ACID, METHYL ESTER; (-)-leukotriene A4; LEUKOTRIENE A4-METHYLESTER SOLUTION (100UG/ML HEXANE/1% TRIETHYLAMINE)

Product Information

Form Liquid

CAS No. 73466-12-3

Molecular Formula C21H32O3

Molecular Weight 332.5

Purity >95%

Melting Point 28-32° C (lit.)

Solubility Soluble in chloroform.

Substrates PKA

Refractive Index 1.65 (Predicted)

Storage and Shipping Information

Storage Store at -80° C