

## 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 occurring 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 Ca<sup>2+</sup> 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

|                          |  |
|--------------------------|--|
| <b>Form</b>              | Liquid   |
| <b>CAS No.</b>           | 73466-12-3                                     |
| <b>Molecular Formula</b> | C <sub>21</sub> H <sub>32</sub> O <sub>3</sub> |
| <b>Molecular Weight</b>  | 332.5  |
| <b>Purity</b>            | >95%   |
| <b>Melting Point</b>     | 28-32° C (lit.)                                |
| <b>Solubility</b>        | Soluble in chloroform.                         |
| <b>Substrates</b>        | PKA  |
| <b>Refractive Index</b>  | 1.65 (Predicted)                               |

### Storage and Shipping Information

|                |                 |
|----------------|-----------------|
| <b>Storage</b> | Store at -80° C |
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