

# Recombinant Human Leukotriene A4 Hydrolase Protein

Catalog No.: RP03209 **Recombinant**

## Sequence Information

**Species** Baculovirus-  
**Gene ID** 4048  
**Swiss Prot** P09960  
 Insect Cells

**Tags**  
 C-His

### Synonyms

Leukotriene A-4 hydrolase; LTA-4 hydrolase; Leukotriene A(4) hydrolase; Tripeptide aminopeptidase LTA4H

## Product Information

### Source **Purification**

Baculovirus-Insect Cells  $\geq 95\%$  as determined by SDS-PAGE. $\geq 95\%$  as determined by HPLC.

### Endotoxin

< 1 EU/ $\mu$ g of the protein by LAL method.

### Formulation

Lyophilized from a 0.22  $\mu$ m filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Background

Leukotriene A-4 hydrolase, also known as LTA-4 hydrolase, Leukotriene A (4) hydrolase, LTA4H, and LTA4, is a cytoplasm protein that belongs to the peptidase M1 family. LTA4H hydrolyzes an epoxide moiety of leukotriene A4 (LTA-4) to form leukotriene B4 (LTB-4). This enzyme also has some peptidase activity. The leukotrienes (LTs) are a class of structurally related lipid mediators involved in the development and maintenance of inflammatory and allergic reactions. In the biosynthesis of LTs, arachidonic acid was converted into the unstable intermediate epoxide LTA4, which may, in turn, be conjugated with glutathione to form the spasmogenic LTC4, or hydrolyzed into the pro-inflammatory lipid mediator LTB4 in a reaction catalyzed by Leukotriene A4 hydrolase (LTA4H). LTB4 is a classical chemoattractant of human neutrophils and triggers adherence and aggregation of leukocytes to vascular endothelium, and also modulates immune responses. As a bifunctional zinc metalloenzyme, LTA4H also exhibits an anion-dependant arginyl aminopeptidase activity of high efficiency and specificity in addition to its epoxide hydrolase activity. LTA4H is regarded as a therapeutic target for inflammation.

## Basic Information

### Description

Recombinant Human Leukotriene A4 Hydrolase Protein is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Met1-Asp611) of human Leukotriene A4 Hydrolase (Accession #NP\_000886.1) fused with His tag at the C-terminus.

### Bio-Activity

Measured by its ability to cleave the fluorogenic peptide substrate, Arg-7-amido-4-methylcoumarin (R-AMC). The specific activity is  $>15$  pmoles/min/ $\mu$ g.

### Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

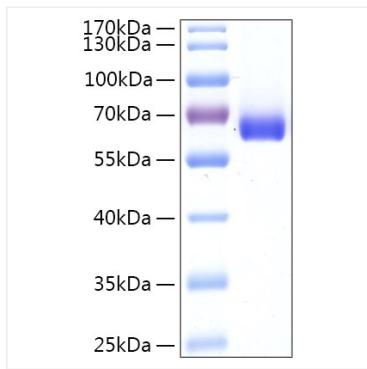
## Contact



[www.abclonal.com](http://www.abclonal.com)

## Validation Data

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Recombinant Human Leukotriene A4 Hydrolase Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.