

Recombinant Human LTA4H Protein (His Tag)

Catalog No. PKSH031715

Note: Centrifuge before opening to ensure complete recovery of vial contents.

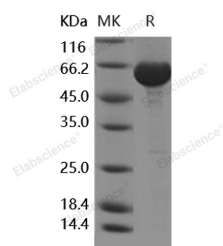
Description

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|------------------------------------|--|
| Synonyms | Leukotriene A-4 hydrolase;LTA-4 hydrolase;Leukotriene A(4) hydrolase;LTA4;LTA4H |
| Species | Human |
| Expression Host | Baculovirus-Insect Cells |
| Sequence | Met 1-Asp611 |
| Accession | NP_000886.1 |
| Calculated Molecular Weight | 70.7 kDa |
| Observed molecular weight | 58-68 kDa |
| Tag | C-His |
| Bioactivity | Measured by its ability to cleave the fluorogenic peptide substrate, Arg-7-amido-4-methylcoumarin(R-AMC). The specific activity is > 15 pmoles/min/μg. |

Properties

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|-----------------------|---|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 EU per μg of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



> 95 % as determined by reducing SDS-PAGE.

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Background

Leukotriene A-4 hydrolase, also known as LTA-4 hydrolase, Leukotriene A (4) hydrolase, LTA4H and LTA4, is cytoplasm protein which 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 proinflammatory 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.

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