



Recombinant Protein Technical Manual

Recombinant Mouse LTA4H Protein (His Tag)(Active)

RPES3299

Product Data:

Product SKU: RPES3299

Size: 20µg

Species: Mouse

Expression host: Baculovirus-Insect Cells

Uniprot: NP_032543.2

Protein Information:

Molecular Mass: 70.4 kDa

AP Molecular Mass: 62 kDa

Tag: C-His

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/µg.

Purity: > 92 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: 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 50mM Tris, 100mM NaCl, pH 8.0

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Lta4h

Immunogen Information:

Sequence: Met 1-Asp 611

Background:

Leukotriene A-4 hydrolase, also known as LTA-4 hydrolase, Leukotriene A (4) hydrolase, LTA4H and LTA4, is a cytoplasmic 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-dependent arginyl aminopeptidase activity of high efficiency and specificity in addition to its epoxide hydrolase activity. LTA4H is regarded as a therapeutic target for inflammation.