Datasheet for ABIN7317520

LTC4S Protein (His tag)

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Overview

Quantity:	50 µg
Target:	LTC4S
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LTC4S protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human LTC4S/LTC4 synthase Protein (His Tag)
Sequence:	Met 1-Ala 150
Characteristics:	A DNA sequence encoding the human LTC4S (NP_665874.1) (Met 1-Ala 150) was fused with a polyhistidine tag at the C-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	LTC4S
Alternative Name:	LTC4S/LTC4 synthase (LTC4S Products)
Background:	Background: Leukotriene C4 synthase, also known as LTC4 synthase, Leukotriene-C(4) synthase, and LTC4S, is a multi-pass membrane protein which belongs to the MAPEG family. LTC4S is detected in lung, platelets and the myelogenous leukemia cell line KG-1 (at protein

Target Details

	level). LTC4S activity is present in eosinophils, basophils, mast cells, certain phagocytic mononuclear cells, endothelial cells, vascular smooth muscle cells and platelets. LTC4S is essential for the production of cysteinyl leukotrienes (Cys-LT), critical mediators in asthma. Mutagenic analysis of the conjugation function of human LTC4S has identified R51 and Y93 as critical for acid and base catalysis of LTA4 and reduced glutathione, respectively. A comparison across species for proteins that possess LTC4S activity reveals conservation of both of these residues, whereas R51 is absent in the FLAP molecules. Thus, within the glutathione S-transferase superfamily of genes, alignment of specific residues allows the separation of LTC4S family members from their most structurally similar counterparts, the FLAP molecules. Defects in LTC4S are the cause of leukotriene C4 synthase deficiency (LTC4 synthase deficiency). LTC4 synthase deficiency is a fatal neurometabolic developmental disorder. It is associated with muscular hypotonia, psychomotor retardation, failure to thrive, and microcephaly. Synonym: LTC4S;MGC33147
Molecular Weight:	17 kDa
NCBI Accession:	NP_665874
Pathways:	Cellular Response to Molecule of Bacterial Origin

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 50 mM Hepes, 0.1 % Triton 0.5 % DOC, 10 % glycerol, pH 8.0
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	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.