

Recombinant Human ALOX5 protein, His-tagged

Cat. No. ALOX5-6847H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human ALOX5 aa. (Glu461~Ser671 (Accession # P09917)) fused with N-terminal His tag was produced in E. coli cells.
Species	Human
Source	E.coli
ProteinLength	Glu461~Ser671
Description	This gene encodes a member of the lipoxygenase gene family and plays a dual role in the synthesis of leukotrienes from arachidonic acid. The encoded protein, which is expressed specifically in bone marrow-derived cells, catalyzes the conversion of arachidonic acid to 5(S)-hydroperoxy-6-trans-8,11,14-cis-eicosatetraenoic acid, and further to the allylic epoxide 5(S)-trans-7,9-trans-11,14-cis-eicosatetraenoic acid (leukotriene A ₄). Leukotrienes are important mediators of a number of inflammatory and allergic conditions. Mutations in the promoter region of this gene lead to a diminished response to antileukotriene drugs used in the treatment of asthma and may also be associated with atherosclerosis and several cancers. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.
Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 25.9kDa.
Endotoxin	<1.0EU per 1ug (determined by the LAL method)

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Purity	>95%
Characteristic	The isoelectric point is 5.5.
Applications	SDS-PAGE; WB; ELISA; IP.
Stability	The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.
Storage buffer	Supplied as lyophilized form in PBS, pH7.4, containing 5% trehalose, 0.01% sarcosyl.
Reconstitution	Reconstitute in sterile PBS, pH7.2-pH7.4.

GENE INFORMATION

Gene Name	ALOX5 arachidonate 5-lipoxygenase [Homo sapiens (human)]
Official Symbol	ALOX5
Synonyms	5-LO; 5LPG; LOG5; 5-LOX; LOX-5; arachidonic 5-lipoxygenase alpha-10 isoform; arachidonic 5-lipoxygenase delta-10-13 isoform; arachidonic 5-lipoxygenase delta-13 isoform; arachidonic 5-lipoxygenase delta-p10 isoform; arachidonic acid 5-lipoxygenase; leukotriene A4 synthase; arachidonate 5-lipoxygenase

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Gene ID	240
mRNA Refseq	NM_000698.4
Protein Refseq	NP_000689.1
UniProt ID	P09917

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