

Datasheet for ABIN7554495
ALOX15B Protein (AA 1-676) (His tag)



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Overview

Quantity:	1 mg
Target:	ALOX15B
Protein Characteristics:	AA 1-676
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALOX15B protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat ALOX15B Protein expressed in mammalian cells.
Sequence:	MAEFRVRVST GEAFGAGTWD KVSIVGTR GESPLPLDN LGKEFTAGAE EDFQVTLPE VGRVLLLRVH KAPPVPLLLG PLAPDAWFCR WFQLTPPRGG HLLFPCYQWL EGAGTLVLQE GTAKVSWADH HPVLQQQRQE ELQARQEMYQ WKAYNPGWPH CLDEKTVEDL ELNIKYSTAK NANFYLQAGS AFAEMKIKGL LDRKGLWRSL NEMKRIFNFR RTPAAEHAFH HWQEDAFFAS QFLNGLNPVL IRRCHYLPKN FPVTDAMVAS VLGPGTSLQA ELEKGSFLV DHGILSGIQT NVINGKPQFS AAPMTLLYQS PGCGPLLPLA IQLSQTGPN SPIFLPTDDK WDWLLAKTWV RNAEFSFHEA LTHLLSHLL PEVFTLATLR QLPCHPLFK LLIPHTRYTL HINTLARELL IVPGQVDRS TGIGIEGFSE LIQRNMKQLN YSLLCLPEDI RTRGVEDIPG YYYRDDGMQI WGAVERFVSE IIGIYPSDE SVQDDRELQA WVREIFSKGF LNQESSGIPS SLETREALVQ YVTMVIFTCS AKHAAVSAGQ FDSCAWMPNL PPSMQLPPT SKGLATCEGF IATLPPVNAV CDVILALWLL SKEPGDQRPL GTYPDEHFTE EAPRRSIATF QSRLAQISRG IQERNQGLVL

Product Details

PYTYLDPPLI ENSVSI **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

Characteristics:

Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:

ALOX15B

Alternative Name:

ALOX15B ([ALOX15B Products](#))

Background:

Polyunsaturated fatty acid lipoygenase ALOX15B (15-lipoxygenase 2) (15-LOX-2) (Arachidonate 15-lipoxygenase B) (15-LOX-B) (EC 1.13.11.33) (Arachidonate 15-lipoxygenase type II) (Linoleate 13-lipoxygenase 15-LOb) (EC 1.13.11.-),FUNCTION: [Isoform A]: Non-heme iron-containing dioxygenase that catalyzes the stereo-specific peroxidation of free and esterified polyunsaturated fatty acids (PUFAs) generating a spectrum of bioactive lipid mediators (PubMed:9177185, PubMed:10625675, PubMed:12704195, PubMed:17493578, PubMed:18311922, PubMed:24282679, PubMed:10542053, PubMed:24497644, PubMed:32404334) (Probable). It inserts peroxy groups at C15 of arachidonate ((5Z,8Z,11Z,14Z)-eicosatetraenoate) producing (15S)-hydroperoxyeicosatetraenoate/(15S)-HPETE (PubMed:17493578, PubMed:12704195, PubMed:24282679, PubMed:9177185,

Target Details

PubMed:11956198, PubMed:10625675, PubMed:24497644) (Probable). Also peroxidizes linoleate ((9Z,12Z)-octadecadienoate) to 13-hydroperoxyoctadecadienoate/13-HPODE (Probable) (PubMed:10542053, PubMed:27435673). Oxygenates arachidonyl derivatives such as 2-arachidonoylglycerol (2-AG) leading to the production and extracellular release of 15-hydroxyeicosatetraenoyl glycerol (15-HETE-G) that acts as a peroxisome proliferator-activated receptor alpha agonist (PubMed:18311922, PubMed:17493578, PubMed:11956198). Has the ability to efficiently class-switch ALOX5 pro-inflammatory mediators into anti-inflammatory intermediates (PubMed:27145229). Participates in the sequential oxidations of DHA ((4Z,7Z,10Z,13Z,16Z,19Z)-docosahexaenoate) to generate specialized pro-resolving mediators (SPMs) resolvin D5 ((7S,17S)-diHPDHA), which can actively down-regulate the immune response and have anti-aggregation properties with platelets (PubMed:32404334). In addition to free PUFAs hydrolyzed from phospholipids, it directly oxidizes PUFAs esterified to membrane-bound phospholipids (PubMed:27435673). Has no detectable 8S-lipoxygenase activity on arachidonate but reacts with (8S)-HPETE to produce (8S,15S)-diHPETE (Probable). May regulate progression through the cell cycle and cell proliferation (PubMed:12704195, PubMed:11839751). May also regulate cytokine secretion by macrophages and therefore play a role in the immune response (PubMed:18067895). May also regulate macrophage differentiation into proatherogenic foam cells (PubMed:22912809). {ECO:0000269|PubMed:10542053, ECO:0000269|PubMed:10625675, ECO:0000269|PubMed:11839751, ECO:0000269|PubMed:11956198, ECO:0000269|PubMed:12704195, ECO:0000269|PubMed:17493578, ECO:0000269|PubMed:18067895, ECO:0000269|PubMed:18311922, ECO:0000269|PubMed:22912809, ECO:0000269|PubMed:24282679, ECO:0000269|PubMed:24497644, ECO:0000269|PubMed:27145229, ECO:0000269|PubMed:27435673, ECO:0000269|PubMed:32404334, ECO:0000269|PubMed:9177185, ECO:0000305|PubMed:10542053, ECO:0000305|PubMed:16112079, ECO:0000305|PubMed:27145229, ECO:0000305|PubMed:27435673}., FUNCTION: [Isoform B]: Does not convert arachidonic acid to 15S-hydroperoxyeicosatetraenoic acid/(15S)-HPETE. {ECO:0000269|PubMed:12704195}.

Molecular Weight: 75.9 kDa

UniProt: [O15296](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a

Application Details

guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months