Datasheet for ABIN7562390

ALOX8/8-LOX Protein (AA 1-677) (His tag)

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Overview

Quantity:	1 mg
Target:	ALOX8/8-LOX (ALOX8)
Protein Characteristics:	AA 1-677
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALOX8/8-LOX protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Alox8 Protein expressed in mammalian cells.
Sequence:	MAKCRVRVST GEACGAGTWD KVSVSIVGTH GESPLVPLDH LGKEFSAGAE EDFEVTLPQD VGTVLMLRVH KAPPEVSLPL MSFRSDAWFC RWFELEWLPG AALHFPCYQW LEGAGELVLR EGAAKVSWQD HHPTLQDQRQ KELESRQKMY SWKTYIEGWP RCLDHETVKD LDLNIKYSAM KNAKLFFKAH SAYTELKVKG LLDRTGLWRS LREMRRLFNF RKTPAAEYVF AHWQEDAFFA SQFLNGINPV LIRRCHSLPN NFPVTDEMVA PVLGPGTSLQ AELEKGSLFL VDHGILSGVH TNILNGKPQF SAAPMTLLHQ SSGSGPLLPI AIQLKQTPGP DNPIFLPSDD TWDWLLAKTW VRNSEFYIHE AVTHLLHAHL IPEVFALATL RQLPRCHPLF KLLIPHIRYT LHINTLAREL LVAPGKLIDK STGLGTGGFS DLIKRNMEQL NYSVLCLPED IRARGVEDIP GYYYRDDGMQ IWGAIKSFVS EIVSIYYPSD TSVQDDQELQ AWVREIFSEG FLGRESSGMP SLLDTREALV QYITMVIFTC SAKHAAVSSG QFDSCVWMPN LPPTMQLPPP TSKGQARPES FIATLPAVNS SSYHIIALWL LSAEPGDQRP LGHYPDEHFT EDAPRRSVAA FQRKLIQISK GIRERNRGLA LPYTYLDPPL IENSVSI **Sequence without tag. The proposed Purification-Tag is based on**

Product Details

	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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	ALOX8/8-LOX (ALOX8)
Alternative Name:	Alox8 (ALOX8 Products)
Background:	Polyunsaturated fatty acid lipoxygenase ALOX8 (15-lipoxygenase 2) (15-LOX-2) (Arachidonate 15-lipoxygenase B) (15-LOX-B) (Arachidonate 8S-lipoxygenase) (8-LOX) (8S-LOX) (EC 1.13.11.-) (Linoleate 9S-lipoxygenase ALOX8) (EC 1.13.11.58),FUNCTION: Non-heme iron-containing dioxygenase that catalyzes the stereo-specific peroxidation of free and esterified polyunsaturated fatty acids generating a spectrum of bioactive lipid mediators (PubMed:9305900, PubMed:10965849, PubMed:10625675, PubMed:16143298, PubMed:16112079, PubMed:15558016, PubMed:27435673). Catalyzes the peroxidation of arachidonate and linoleate into (8S)-HPETE and (9S)-HPODE respectively (PubMed:9305900, PubMed:10965849, PubMed:10625675, PubMed:16143298, PubMed:16112079,

Target Details

	PubMed:15558016, PubMed:27435673). In addition to generate (8S)-HPETE from free arachidonic acid (AA), may produce other HETE isomers from phospholipid-esterified polyunsaturated fatty acids and minor products derived from (8S)-HPETE itself that may include leukotriene A4 and 8,15-diHPETE (PubMed:16143298, PubMed:16112079, PubMed:27435673). With free arachidonate as substrate, has no detectable 15S-lipoxygenase activity and only displays a 8S-lipoxygenase activity (PubMed:10625675, PubMed:16112079, PubMed:16143298, PubMed:15558016, PubMed:10965849, PubMed:9305900). However may have a 15S-lipoxygenase activity with (8S)-HPETE to produce (8S,15S)-diHPETE and when oxidizes directly arachidonic acid esterified to membrane-bound phospholipids to produce a phospholipid-esterified 15-HpETE (PubMed:27435673, PubMed:16112079, PubMed:16143298). May also catalyze (15S)-HPETE peroxidation to produce 8,15-diHPETE (PubMed:16112079). May play a role in keratinocyte differentiation through activation of the peroxisome proliferator activated receptor signaling pathway (PubMed:10965849). {ECO:0000269|PubMed:10625675, ECO:0000269|PubMed:10965849, ECO:0000269|PubMed:15558016, ECO:0000269|PubMed:16112079, ECO:0000269|PubMed:16143298, ECO:0000269|PubMed:27435673, ECO:0000269|PubMed:9305900}.
Molecular Weight:	76.2 kDa
UniProt:	O35936

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a 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