Datasheet for ABIN7554416

ALOXE3 Protein (AA 1-711) (His tag)

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Overview

Quantity:	1 mg
Target:	ALOXE3
Protein Characteristics:	AA 1-711
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALOXE3 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant ALOXE3 Protein expressed in mammalian cells.
Sequence:	MAVYRLCVTT GPYLRAGTLD NISVTLVGTC GESPKQRLDR MGRDFAPGSV QKYKVRCTAE LGELLLLRVH KERYAFFRKD SWYCSRICVT EPDGSVSHFP CYQWIEGYCT VELRPGTART ICQDSLPLLL DHRTRELRAR QECYRWKIYA PGFPCMVDVN SFQEMESDKK FALTKTTTCV DQGDSSGNRY LPGFPMKIDI PSLMYMEPNV RYSATKTISL LFNAIPASLG MKLRGLLDRK GSWKKLDDMQ NIFWCHKTFT TKYVTEHWCE DHFFGYQYLN GVNPVMLHCI SSLPSKLPVT NDMVAPLLGQ DTCLQTELER GNIFLADYWI LAEAPTHCLN GRQQYVAAPL CLLWLSPQGA LVPLAIQLSQ TPGPDSPIFL PTDSEWDWLL AKTWVRNSEF LVHENNTHFL CTHLLCEAFA MATLRQLPLC HPIYKLLLPH TRYTLQVNTI ARATLLNPEG LVDQVTSIGR QGLIYLMSTG LAHFTYTNFC LPDSLRARGV LAIPNYHYRD DGLKIWAAIE SFVSEIVGYY YPSDASVQQD SELQAWTGEI FAQAFLGRES SGFPSRLCTP GEMVKFLTAI IFNCSAQHAA VNSGQHDFGA WMPNAPSSMR QPPPQTKGTT TLKTYLDTLP EVNISCNNLL LFWLVSQEPK DQRPLGTYPD EHFTEEAPRR SIAAFQSRLA QISRDIQERN QGLALPYTYL DPPLIENSVS I **Sequence without tag.**

Product Details

	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.
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:	ALOXE3
Alternative Name:	ALOXE3 (ALOXE3 Products)
Background:	Hydroperoxide isomerase ALOXE3 (Epidermis-type lipoxygenase 3) (Epidermal LOX-3) (e-LOX-3) (eLOX-3) (Hydroperoxy dehydratase ALOXE3) (Hydroperoxy icosatetraenoate dehydratase) (EC 4.2.1.152) (Hydroperoxy icosatetraenoate isomerase) (EC 5.4.4.7),FUNCTION: Non-heme iron-containing lipoxygenase which is atypical in that it displays a prominent hydroperoxide isomerase activity and a reduced lipoxygenases activity (PubMed:12881489, PubMed:17045234, PubMed:20921226, PubMed:20923767). The hydroperoxide isomerase activity catalyzes the isomerization of hydroperoxides, derived from arachidonic and linoleic acid by ALOX12B, into hepoxilin-type epoxyalcohols and ketones (PubMed:12881489,

Target Details

	PubMed:17045234, PubMed:20923767). In presence of oxygen, oxygenates polyunsaturated fatty acids, including arachidonic acid, to produce fatty acid hydroperoxides (PubMed:20921226). In the skin, acts downstream of ALOX12B on the linoleate moiety of esterified omega-hydroxyacyl-sphingosine (EOS) ceramides to produce an epoxy-ketone derivative, a crucial step in the conjugation of omega-hydroxyceramide to membrane proteins (PubMed:21558561). Therefore plays a crucial role in the synthesis of corneocytes lipid envelope and the establishment of the skin barrier to water loss (PubMed:21558561). In parallel, it may have a signaling function in barrier formation through the production of hepoxilins metabolites (PubMed:21558561). Also plays a role in adipocyte differentiation through hepoxilin A3 and hepoxilin B3 production which in turn activate PPARG (By similarity). Through the production of hepoxilins in the spinal cord, it may regulate inflammatory tactile allodynia (By similarity). {ECO:0000250|UniProtKB:D3ZKX9, ECO:0000250|UniProtKB:Q9WV07, ECO:0000269|PubMed:12881489, ECO:0000269|PubMed:17045234, ECO:0000269|PubMed:20921226, ECO:0000269|PubMed:20923767, ECO:0000269|PubMed:21558561}.
Molecular Weight:	80.5 kDa
UniProt:	Q9BYJ1
Pathways:	Cell-Cell Junction Organization

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