Datasheet for ABIN7551946

ACOX1 Protein (AA 1-660) (His tag)

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Overview

Quantity:	1 mg
Target:	ACOX1
Protein Characteristics:	AA 1-660
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ACOX1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant ACOX1 Protein expressed in mammalian cells.
Sequence:	MNPDLRRERD SASFNPELLT HILDGSPEKT RRRREIENMI LNDPDFQHED LNFLTRSQRY EVAVRKSAIM VKKMREFGIA DPDEIMWFKK LHLVNFVEPV GLNYSMFIPT LLNQGTTAQK EKWLLSSKGL QIIGTYAQTE MGHGTHLRGL ETTATYDPET QEFILNSPTV TSIKWWPGGL GKTSNHAIVL AQLITKGKCY GLHAFIVPIR EIGTHKPLPG ITVGDIGPKF GYDEIDNGYL KMDNHRIPRE NMLMKYAQVK PDGTYVKPLS NKLTYGTMVF VRSFLVGEAA RALSKACTIA IRYSAVRHQS EIKPGEPEPQ ILDFQTQQYK LFPLLATAYA FQFVGAYMKE TYHRINEGIG QGDLSELPEL HALTAGLKAF TSWTANTGIE ACRMACGGHG YSHCSGLPNI YVNFTPSCTF EGENTVMMLQ TARFLMKSYD QVHSGKLVCG MVSYLNDLPS QRIQPQQVAV WPTMVDINSP ESLTEAYKLR AARLVEIAAK NLQKEVIHRK SKEVAWNLTS VDLVRASEAH CHYVVVKLFS EKLLKIQDKA IQAVLRSLCL LYSLYGISQN AGDFLQGSIM TEPQITQVNQ RVKELLTLIR SDAVALVDAF DFQDVTLGSV LGRYDGNVYE NLFEWAKNSP LNKAEVHESY KHLKSLQSKL **Sequence without tag. The proposed Purification-Tag is based on experiences with the**

Product Details

	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:	ACOX1
Alternative Name:	ACOX1 (ACOX1 Products)
Background:	Peroxisomal acyl-coenzyme A oxidase 1 (AOX) (EC 1.3.3.6) (Palmitoyl-CoA oxidase) (Peroxisomal fatty acyl-CoA oxidase) (Straight-chain acyl-CoA oxidase) (SCOX) [Cleaved into: Peroxisomal acyl-CoA oxidase 1, A chain, Peroxisomal acyl-CoA oxidase 1, B chain, Peroxisomal acyl-CoA oxidase 1, C chain],FUNCTION: Involved in the initial and rate-limiting step of peroxisomal beta-oxidation of straight-chain saturated and unsaturated very-long-chain fatty acids (PubMed:7876265, PubMed:15060085, PubMed:17458872, PubMed:17603022, PubMed:32169171, PubMed:33234382). Catalyzes the desaturation of fatty acyl-CoAs such as palmitoyl-CoA (hexadecanoyl-CoA) to 2-trans-enoyl-CoAs ((2E)-enoyl-CoAs) such as (2E)-hexadecenoyl-CoA, and donates electrons directly to molecular oxygen (O(2)), thereby

Target Details

	producing hydrogen peroxide (H(2)O(2)) (PubMed:7876265, PubMed:17458872, PubMed:17603022). {ECO:0000269|PubMed:15060085, ECO:0000269|PubMed:17458872, ECO:0000269|PubMed:17603022, ECO:0000269|PubMed:32169171, ECO:0000269|PubMed:33234382, ECO:0000269|PubMed:7876265}., FUNCTION: [Isoform 1]: Shows highest activity against medium-chain fatty acyl-CoAs. Shows optimum activity with a chain length of 10 carbons (decanoyl-CoA) in vitro. {ECO:0000269|PubMed:17603022}., FUNCTION: [Isoform 2]: Is active against a much broader range of substrates and shows activity towards long-chain fatty acyl-CoAs. {ECO:0000269|PubMed:17603022}.
Molecular Weight:	74.4 kDa
UniProt:	Q15067
Pathways:	Regulation of Lipid Metabolism by PPARalpha, Monocarboxylic Acid Catabolic Process

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