Datasheet for ABIN7562407

AOX1 Protein (AA 1-1333) (His tag)

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Overview

Quantity:	1 mg
Target:	AOX1
Protein Characteristics:	AA 1-1333
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This AOX1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Aox1 Protein expressed in mammalian cells.
Sequence:	MDPIQLLFYV NGQKVVEKNV DPEMMLLPYL RKNLRLTGTK YGCGGGGCGA CTVMISRYNP STKAIRHHPV NACLTPICSL HGTAVTTVEG LGNTRTRLHP IQERIAKCHG TQCGFCTPGM VMSMYALLRN HPEPTLDQLT DALGGNLCRC TGYRPIIDAC KTFCKASACC QSKENGVCCL DQEINGLAES QEEDKTSPEL FSEEEFLPLD PTQELIFPPE LMRIAEKQPP KTRVFYGERV TWISPVTLKE LVEAKFKYPQ APIVMGYTSV GPEVKFKGVF HPIIISPDRI EELGVISQAR DGLTLGAGLS LDQVKDILAD IVQKLPEEKT QTYRALLKHL RTLAGSQIRN MASLGGHIVS RHLDSDLNPL LAVGNCTLNL LSKDGERRIP LSEEFLRKCP EADLKPQEVL VSVNIPWSRK WEFVSAFRQA QRQQNALAIV NSGMRVLFRE GGGVIEELSI LYGGVGSTII SAKNSCQRLI GRPWNEGMLD TRCRLVLDEV TLAASAPGGK VEFKRTLIIS FLFKFYLEVS QGLKREDPGH SPSLAGNHES ALDDLHSKHP WRTLTHQNVD PAQLPQDPIG RPIMHLSGIK HATGEAIYCD DMPAVDRELF LTFVTSSRAH AKIVSIDLSE ALSLPGVVDI ITADHLQEAN TFGTETFLAT DEVHCVGHLV CAVIADSETR AKQAAKQVKV VYQDLAPLIL TIEEAIQHKS FFKSERKLEC

	GNVDEAFKIV DQILEGEIHI GGQEHFYMET QSMLVVPKGE DGEIDIYVST QFPKYIQDIV AATLKLSANK VMCHVRRVGG AFGGKVGKTS ILAAITAFAA SKHGRAVRCI LERGEDMLIT GGRHPYLGKY KAGFMNEGRI LALDVEHYCN GGCSLDESLW VIEMGLLKLD NAYKFPNLRC RGWACRTNLP SNTALRGFGF PQAGLVTEAC ITEVAIKCGL SPEQVRTINM YKHVDTTHYK QEFSAKALSE CWRECMAKCS YFERKAAIGK FNAENSWKKR GMAVIPLKFP VGIGSVAMGQ AAALVHIYLD GSALVSHGGI EMGQGVHTKM IQVVSRELRM PMSSVHLRGT STETVPNTNA SGGSVVADLN GLAVKDACQT LLKRLEPIIS KNPQGTWKDW AQTAFDQSIS LSAVGYFRGY ESNIDWEKGE GHPFEYFVFG AACSEVEINC LTGDHKNIRT NIVMDVGHSI NPALDIGQVE GAFIQGMGLY TIEELSYSPQ GTLYSRGPNQ YKIPAICDIP TEMHISFLPP SEHSNTLYSS KGLGESGVFL GCSVFFAIHD AVKAARQERG ISGPWKLNSP LTPEKIRMAC EDKFTKMIPR DEPGSYVPCN IPV **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.**
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:	AOX1
Alternative Name:	Aox1 (AOX1 Products)
Background:	Aldehyde oxidase 1 (EC 1.2.3.1) (Azaheterocycle hydroxylase 1) (EC 1.17.3.-) (Retinal oxidase),FUNCTION: Oxidase with broad substrate specificity, oxidizing aromatic azaheterocycles, such as N1-methylnicotinamide, N-methylphthalazinium and phthalazine, as well as aldehydes, such as benzaldehyde, retinal, pyridoxal, and vanillin. Plays a role in the metabolism of xenobiotics and drugs containing aromatic azaheterocyclic substituents. Participates in the bioactivation of prodrugs such as famciclovir, catalyzing the oxidation step from 6-deoxypenciclovir to penciclovir, which is a potent antiviral agent. Also plays a role in the reductive metabolism of the xenobiotic imidacloprid (IMI) via its nitroreduction to nitrosoguanidine (IMI-NNO) and aminoguanidine (IMI-NNH(2)). Is probably involved in the regulation of reactive oxygen species homeostasis. May be a prominent source of superoxide generation via the one-electron reduction of molecular oxygen. May also catalyze nitric oxide (NO) production via the reduction of nitrite to NO with NADH or aldehyde as electron donor. May play a role in adipogenesis. Cannot use xanthine and hypoxanthine as substrate. {ECO:0000269|PubMed:10190983, ECO:0000269|PubMed:18671973, ECO:0000269|PubMed:19401776, ECO:0000269|PubMed:23462233}.
Molecular Weight:	146.7 kDa
UniProt:	O54754

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.

Handling

Expiry Date:	12 months