

Datasheet for ABIN3088886 AOX1 Protein (AA 1-1338) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	AOX1
Protein Characteristics:	AA 1-1338
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This AOX1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), Crystallization (Crys), ELISA

Product Details

Sequence:	MDRASELLFY VNGRKVIEKN VDPETMLLPY LRKKLRLTGT KYGCGGGGCG ACTVMISRYN PITKRIRHHP ANACLIPICS LYGAAVTTVE GIGSTHTRIH PVQERIAKCH GTQCGFCTPG MVMSIYTLLR NHPEPTLDQL TDALGGNLCR CTGYRPIIDA CKTFCKTSGC CQSKENGVC LDQGINGLPE FEEGSKTSPK LFAEEEFLLPL DPTQELIFPP ELMIMAEEKS QRTRVFGSER MMWFSPVTLK ELLEFKFKYP QAPVIMGNTS VGPEVKFKGV FHPVIISPDR IEELSVVNHA YNGLTGAGL SLAQVKDILA DVVQKLPEEK TQMYHALLKH LGTLGSQIR NMAISLGGHII SRHPDSDLNP ILAVGNCTLN LLSKEGKRQI PLNEQFLSKC PNADLKPQEI LVSVNIPYSR KWEFVSAFRQ AQRQENALAI VNSGMRVFFG EGDGIIRELC ISYGGVGPAT ICAKNSCQKL IGRHWNEQML DIACRLILNE VSLGSAPEGG KVEFKRTLII SFLFKFYLEV SQILKKMDPV HYPGLADKYE SALEDLHSHK HCSTLKYQNI GPKQHPEDPI GHPIMHLSGV KHATGEAIYC DDMPLVDQEL FLTFVTSSRA HAKIVSIDLS EALSMPGVVD IMTAEHLSDV NSFCFFTEAE KFLATDKVFC VGQLVCAVLA DSEVQAKRAA KRVKIVYQDL EPLILTIEES IQHNSSFKPE
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RKLEYGNVDE AFKVVDQILE GEIHMGGQEH FYMETQSMMLV VPKGEDQEMD VYVSTQFPKY
IQDIVASTLK LPANKVMCHV RRVGGAFFGK VLKTGIAAV TAFANKHGR AVRCVLERGE
DMLITGGRHP YLGKYKAGFM NDGRILALDM EHYSNAGASL DESLFVIEMG LLKMDNAYKF
PNLRCRGWAC RTNLPSTAF RGFGFPQAAL ITESCITEVA AKCGLSPEKV RIINMYKEID
QTPYKQEINA KNLIQCWREC MAMSSYSLRK VAVEKFNAEN YWKKKGLAMV PLKFPVGLGS
RAAGQAAALV HIYLDGSVLV THGGIEMGQG VHTKMIQVVS RELRMPMSNV HLRGTSTETV
PNANISGGSV VADLNLAVK DACQTLLKRL EPIISKNPKG TWKDWAQTAF DESINLSAVG
YFRGYESDMN WEKGEGQPFE YFVYGAACSE VEIDCLTGDH KNIRTDIVMD VGCSINPAID
IGQIEGAFIQ GMGLYTIEEL NYSPQGILHT RGPDQYKIPA ICDMPTELHI ALLPPSQNSN
TLYSSKGLGE SGVFLGCSVF FAIHDAVSAA RQERGLHGPL TLNSPLTPEK IRMACEDKFT
KMIPRDEPGS YVPWNVPI

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human AOX1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded protein.

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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

Product Details

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target: AOX1

Alternative Name: AOX1 ([AOX1 Products](#))

Background: Oxidase with broad substrate specificity, oxidizing aromatic azaheterocycles, such as N1-methylnicotinamide and N-methylphthalazinium, as well as aldehydes, such as benzaldehyde, retinal, pyridoxal, and vanillin. Plays a key 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. 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. Also may 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. {ECO:0000269|PubMed:20444863, ECO:0000269|PubMed:22031625, ECO:0000269|PubMed:22279051, ECO:0000269|PubMed:22522748, ECO:0000269|PubMed:22996261, ECO:0000269|PubMed:23857892, ECO:0000269|PubMed:7786031, ECO:0000269|PubMed:9224775}.

Molecular Weight: 148.9 kDa Including tag.

UniProt: [Q06278](#)

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.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process