

Datasheet for ABIN3134995
Aox4 Protein (AA 1-1336) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	Aox4 (AOX4)
Protein Characteristics:	AA 1-1336
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Aox4 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MPSVSESEDEL IFFVNGKKVI EKNPDPEKNL LFYTRKVLNL TGTKYSCGTG GCGACTVMVS RYNPKTRKIH HYPATACLVP ICWLHGAAIT TVEGVGSIKK RVHPVQERLA KCHGTQCGFC SPGMVMSIYT LLRNHPEPTP DQITEALGGN LCRCTGYRPI VESGKTFSQK STVCQMKGSG KCCMDPDEKC LESREKKMCT KLYNEDEFQP FDPSQEPIFP PELIRMAEDP NKRRLTFQ GK RTTWIIPVTL NDLLELKASY PEAPLVMGNT TVGPGIKFND EFYPVFISPL GVPELNLMDT TNNGVTIGAG YSLAQLKDTL DFLVSEQPKE KTKTFHALQK HLRTLGPQI RNMATLGGHT ASRPNFSDLN PILAAGNATI NVVSREGKDR QLPLNGPFLE KLPEADLKPE EVILSIFIPY TAQWQFVSG LRLAQRQENAF AIVNAGMSVE FEEGTNTIKD LKMFFGVSAP TVVSASQTCK QLIGRQWDDQ MLSDACQLVL QEIRIPDAE GGMVEYRRTL IISLLFKFYL KVQRWLNEMD PQKFPDIPGK FVSALDDFPI ETPQGIQMFQ CVDPKQPQKD PVGHPIMHQS GIKHATGEAI FIDDMPPIDQ ELCLAVVTST RAHAKITSLD VSEALACPGV VDVITAEDVP GENDHNGEIL

YAQSEVICVG QIICTVAADT YIHAKAAKR VKIAYDDIEP TIITIEEAL HNSFLSPEKK IEQGNVDYAF
KHVDQIVEGE IHVEGQEHFY METQTILAIP QTEDKEMVLH LGTQFPTHVQ EfvSaALNVP
RSRIACHMKR AGGAFGGKVT KPALLGAVCA VAANKTGRPI RFIERSDDM LITAGRHPLL
GKYKIGFMNN GEIRAADVEY YTNGGCTPDE SELVIEFVVL KSENTYHIPN FRCRGRACKT
NLPSNTAFRG FGFPQATVVV EAYIAAVASK CNLLPEEVRE INMYKTSKT AYKQTFNPEP
LRRCWKECLE KSSFFARKKA AEEFNGNNYW KKRGLAVVPM KFSVAVPIAF YNQAALVHI
FLDGSVLLTH GGCELGQLH TKMIQVASRE LNPkSYVHF SETSTTVPN SAFTAGSMGA
DINGKAVQNA CQILMDRLRP IIRKNPKGKW EEWIKMAFEE SISLSATGYF KGYQTNMDWK
KEEGDPYPYY VYGAACSEVE VDCLTGAHKL LRTDIFVDA FSNPALDIG QVEGAFIQGM
GFYTTEELKY SPKGVLYSRG PEDYKIPTIT EIPEEFYVTL VHSRNPIAY SSKGLGEAGM
FLGSSVLFAl YDAVTTARKE RGLSDIFPLN SPATPEVIRM ACTDQFTEMI PRDDPSTFTP WSIHVS

Sequence without tag. The proposed Strep-Tag is based on experience s 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.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system -

Product Details

all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALICE®).
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Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
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Grade:	custom-made
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Target Details

Target:	Aox4 (AOX4)
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Alternative Name:	Aox4
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Background:	Aldehyde oxidase 4 (EC 1.2.3.1) (Aldehyde oxidase homolog 2) (Azaheterocycle hydroxylase 4) (EC 1.17.3.-) (Retinal oxidase),FUNCTION: Aldehyde oxidase able to catalyze the oxidation of retinaldehyde into retinoate. Is responsible for the major all-trans-retinaldehyde-metabolizing activity in the Harderian gland, and contributes a significant amount of the same activity in the skin. Is devoid of pyridoxal-oxidizing activity, in contrast to the other aldehyde oxidases. Acts as a negative modulator of the epidermal trophism. May be able to oxidize a wide variety of aldehydes into their corresponding carboxylates and to hydroxylate azaheterocycles. {ECO:0000269 PubMed:18981221}.
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Molecular Weight:	148.3 kDa
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UniProt:	Q3TYQ9
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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 guarantee though.
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Comment:	ALICE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce
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Application Details

even the most difficult-to-express proteins, including those that require post-translational modifications.

During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months