

Datasheet for ABIN3131204

Aox3 Protein (AA 1-1335) (Strep Tag)



Overview

Quantity:	250 μg
Target:	Aox3 (AOX3)
Protein Characteristics:	AA 1-1335
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Aox3 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Brand:	AliCE®
Sequence:	MSPSKESDEL IFFVNGKKVT ERNADPEVNL LFYLRKVIRL TGTKYGCGGG DCGACTVMIS
	RYDPISKRIS HFSATACLVP ICSLHGAAVT TVEGIGSTKT RIHPVQERIA KGHGTQCGFC
	TPGMVMSIYT LLRNHPEPST EQIMETLGGN LCRCTGYRPI VESAKSFCPS STCCQMNGEG
	KCCLDEEKNE PERKNSVCTK LYEKKEFQPL DPTQELIFPP ELMRMAEESQ NTVLTFRGER
	TTWIAPGTLN DLLELKMKHP SAPLVIGNTY LGLHMKFTDV SYPIIISPAR ILELFVVTNT
	KQGLTLGAGL SLTQVKNVLS DVVSRLPKEK TQIYCALLKQ LKTLAGQQIR NVASLGGHII
	SRLPTSDLNP ILGIGNCILN VASTEGIQQI PLNDHFLAGV PDAILKPEQV LISVFVPRSS
	KWEFVSAFRQ APRQQNAFAT VNAGMKVVFK EDTNTITDLG ILYGGIGATV ISADKSCRQL
	IGRCWDEEML DDAGKMICEE VSLLMAAPGG MEEYRKTLAI SFLFMFYLDV LKQLKTRDPH
	KYPDISQKLL HILEDFPLTM PYGMQSFQDV DFQQPLQDPI GRPIMHQSGI KHATGEAVFC
	DDMSVLPGEL FLAVVTSSKS HAKIISLDAS EALASLGVVD VVTARDVPGD NGREEESLYA

QDEVICVGQI VCAVAADSYA HAQQAAKKVK IVYQDIEPMI VTVQDALQYE SFIGPERKLE
QGNVEEAFQC ADQILEGEVH LGGQEHFYME TQSVRVVPKG EDKEMDIYVS SQDAAFTQEM
VARTLGIPKN RINCHVKRVG GAFGGKASKP GLLASVAAVA AQKTGRPIRF ILERRDDMLI
TGGRHPLLGK YKIGFMNNGK IKAADIQLYI NGGCTPDDSE LVIEYALLKL ENAYKIPNLR
VRGRVCKTNL PSNTAFRGFG FPQGAFVTET CMSAVAAKCR LPPEKVRELN MYRTIDRTIH
NQEFDPTNLL QCWEACVENS SYYNRKKAVD EFNQQRFWKK RGIAIIPMKF SVGFPKTFYY
QAAALVQIYT DGSVLVAHGG VELGQGINTK MIQVASRELK IPMSYIHLDE MSTVTVPNTV
TTGASTGADV NGRAVQNACQ ILMKRLEPII KQNPSGTWEE WVKEAFVQSI SLSATGYFRG
YQADMDWEKG EGDIFPYFVF GAACSEVEID CLTGAHKNIR TDIVMDGSFS INPAVDIGQI
EGAFVQGLGL YTLEELKYSP EGVLYTRGPH QYKIASVTDI PEEFHVSLLT PTPNPKAIYS
SKGLGEAGTF LGCSVFFAIA AAVAAAREER GLSPIWAINS PATAEVIRMA CEDQFTNLVP
QTDSKCCKPW SIPVA

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 posttranslational 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!

Concentration:

Aox3 (AOX3)

- · 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®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:

Aox3
Aldehyde oxidase 3 (EC 1.2.3.1) (Aldehyde oxidase homolog 1) (Azaheterocycle hydroxylase 3)
(EC 1.17.3),FUNCTION: Oxidase with broad substrate specificity, oxidizing aromatic
azaheterocycles, such as N1-methylnicotinamide and phthalazine, as well as aldehydes, such
as benzaldehyde, retinal and pyridoxal. Plays a key role in the metabolism of xenobiotics and
drugs containing aromatic azaheterocyclic substituents. 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.
{ECO:0000269 PubMed:11562361, ECO:0000269 PubMed:18981221,
ECO:0000269 PubMed:21705476, ECO:0000269 PubMed:23019336}.
146.9 kDa
G3X982

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

Expiry Date:

12 months

Application Details		
	guarantee though.	
Comment:	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 - 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.	