Datasheet for ABIN3131191

ATF6 Protein (AA 1-656) (rho-1D4 tag)

1 Image

Go to Product page

Overview

Quantity:	1 mg
Target:	ATF6
Protein Characteristics:	AA 1-656
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATF6 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	MESPFSPVLP HGPDEDWEST LFAELGYFTD TDDVHFDAAH EAYENNFDHL NFDLDLMPWE SDLWSPGSHF CSDMKAEPQP LSPASSSCSI SSPRSTDSCS STQHVPEELD LLSSSQSPLS LYGDSCNSPS SVEPLKEEKP VTGPGNKTEH GLTPKKKIQM SSKPSVQPKP LLLPAAPKTQ TNASVPAKAI IIQTLPALMP LAKQQSIISI QPAPTKGQTV LLSQPTVVQL QSPAVLSSAQ PVLAVTGGAA QLPNHVVNVL PAPVVSSPVN GKLSVTKPVL QSATRSMGSD IAVLRRQQRM IKNRESACQS RKKKKEYMLG LEARLKAALS ENEQLKKENG SLKRQLDEVV SENQRLKVPS PKRRAVCVMI VLAFIMLNYG PMSMLEQESR RVKPSVSPAN QRRHLLEFSA KEVKDTSDGD NQKDSYSYDH SVSNDKALMV LSEEPLLYMP PPPCQPLINT TESLRLNHEL RGWVHRHEVE RTKSRRMTNS QQKARILQGA LEQGSNSQLM AVQYTETTSI SRNSGSELQV YYASPGSYQG FFDAIRRRGD TFYVVSFRRD HLLLPATTHN KTTRPKMSIV LPAININDNV INGQDYEVMM QIDCQVMDTR ILHIKSSSVP PYLRDHQRNQ TSTFFGSPPT TTETTHVVST IPESLQ **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. • Mouse Atf6 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 receival 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:	Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells: 1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot. 2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot. 3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. 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.

Product Details

Grade:	Crystallography grade

Target Details

Target:	ATF6
Alternative Name:	Atf6 (ATF6 Products)
Background:	Transmembrane glycoprotein of the endoplasmic reticulum that functions as a transcription activator and initiates the unfolded protein response (UPR) during endoplasmic reticulum stress. Cleaved upon ER stress, the N-terminal processed cyclic AMP-dependent transcription factor ATF-6 alpha translocates to the nucleus where it activates transcription of genes involved in the UPR. Binds DNA on the 5'-CCAC[GA]-3'half of the ER stress response element (ERSE) (5'-CCAAT-N(9)-CCAC[GA]-3') and of ERSE II (5'-ATTGG-N-CCACG-3'). Binding to ERSE requires binding of NF-Y to ERSE. Could also be involved in activation of transcription by the serum response factor. May play a role in foveal development and cone function in the retina (By similarity). {ECO:0000250|UniProtKB:P18850}.
Molecular Weight:	73.9 kDa Including tag.
UniProt:	F6VAN0
Pathways:	ER-Nucleus Signaling, Unfolded Protein Response

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 gurantee though.
Comment:	Protein has not been tested for activity yet. 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

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