

Datasheet for ABIN3089716
ATF2 Protein (AA 1-505) (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	ATF2
Protein Characteristics:	AA 1-505
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATF2 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS), Crystallization (Crys)

Product Details

Sequence: MKFKLHVNSA RQYKDLWNMS DDKPFLCTAP GCGQRFTNED HLAVHKKHKE MTLKFGPARN
DSVIVADQTP TPTRFLKNCE EVGLFNELAS PFENEFKKAS EDDIKKMPLD LSPLATPIIR
SKIEEPSVVE TTHQDSPLPH PESTTSDEKE VPLAQTAQPT SAIVRPASLQ VPNVLLTSSD
SSVIIQAVP SPTSSTVITQ APSSNRPIVP VPGPFPLLLH LPNGQTMPVA IPASITSSNV
HVPAAVPLVR PVTMVPSVPG IPGPSSPQPV QSEAKMRLKA ALTQQHPPVT NGDTVKGHGS
GLVRTQSEES RPQSLQQPAT STTETPASPA HTTPQTQSTS GRRRRAANED PDEKRRKFLE
RNRAAASRCR QKRKVWVQSL EKKAEDLSSL NGQLQSEVTL LRNEVAQLKQ LLLAHKDCPV
TAMQKKSGYH TADKDDSSD ISVPSSPHTE AIQHSSVSTS NGVSSTSKAE AVATSVLTQM
ADQSTEPALS QIVMAPSSQS QPSGS

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

Product Details

- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
 - Human ATF2 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:
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:	ATF2
Alternative Name:	ATF2 (ATF2 Products)
Background:	<p>Transcriptional activator which regulates the transcription of various genes, including those involved in anti-apoptosis, cell growth, and DNA damage response. Dependent on its binding partner, binds to CRE (cAMP response element) consensus sequences (5'-TGACGTCA-3') or to AP-1 (activator protein 1) consensus sequences (5'-TGACTCA-3'). In the nucleus, contributes to global transcription and the DNA damage response, in addition to specific transcriptional activities that are related to cell development, proliferation and death. In the cytoplasm, interacts with and perturbs HK1- and VDAC1-containing complexes at the mitochondrial outer membrane, thereby impairing mitochondrial membrane potential, inducing mitochondrial leakage and promoting cell death. The phosphorylated form (mediated by ATM) plays a role in the DNA damage response and is involved in the ionizing radiation (IR)-induced S phase checkpoint control and in the recruitment of the MRN complex into the IR-induced foci (IRIF). Exhibits histone acetyltransferase (HAT) activity which specifically acetylates histones H2B and H4 in vitro. In concert with CUL3 and RBX1, promotes the degradation of KAT5 thereby attenuating its ability to acetylate and activate ATM. Can elicit oncogenic or tumor suppressor activities depending on the tissue or cell type. {ECO:0000269 PubMed:10821277, ECO:0000269 PubMed:15916964, ECO:0000269 PubMed:18397884, ECO:0000269 PubMed:22304920}.</p>
Molecular Weight:	55.5 kDa Including tag.
UniProt:	P15336
Pathways:	MAPK Signaling , RTK Signaling , Thyroid Hormone Synthesis , Activation of Innate immune Response , Chromatin Binding , Myometrial Relaxation and Contraction , Synaptic Membrane , Tube Formation , Toll-Like Receptors Cascades

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.
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.

Application Details

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