Datasheet for ABIN3136659

THOC1 Protein (AA 1-657) (His tag)

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1 Image

Overview

Quantity:	1 mg
Target:	THOC1
Protein Characteristics:	AA 1-657
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This THOC1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MSPTPALFSL PEARTRFTKS TREALNNKNI KPLLTAFSQL PGSENEKKCT LDQAFRGVLE EEIINHSACE NVLAIISLAI GGVTESVCTA STPFVLLGDV LDCLPLDQCD TIFTFVEKNV ATWKSNTFYS AGKNYLLRMC NDLLRRLSKS QNTVFCGRIQ LFLARLFPLS EKSGLNLQSQ FNLENVTVFN TNEQESTLGQ KHTEDREEGM DVEEGEMGDD EAPTTCSIPI DYNLYRKFWS LQDYFRNPVQ CYEKISWKTF LKYSEEVLAV FKSYKLDDTQ ASRKKMEELK TGGEHVYFAK FLTSEKLMDL QLSDSNFRRH ILLQYLILFQ YLKGQVKFKS SNYVLTDEQS LWIEDTTKSV YQLLSENPPD GERFSKMVEH ILNTEENWNS WKNEGCPSFV KERASDTKPT RVVRKRAAPE DFLGKGPNKK ILIGNEELTR LWNLCPDNME ACKSETREYM PTLEEFFEEA IEQADPENMV ESEYKAVNNS NYGWRALRLL ARRSPHFFQP TNQQFKSLPE YLENMVIKLA KELPPPSEEI KTGEDEDEED NDALLKENES PDVRRDKPIT GEQIESFANK LGEQWKILAP YLEIKDSDIR QIECDSEDMK MRAKQLLVAW QDQEGVHATT DNLISALNKS GLSDLAESLT NDTETNS **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 Thoc1 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:	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:	THOC1
Alternative Name:	Thoc1 (THOC1 Products)
Background:	Required for efficient export of polyadenylated RNA. Acts as component of the THO subcomplex of the TREX complex which is thought to couple mRNA transcription, processing and nuclear export, and which specifically associates with spliced mRNA and not with unspliced pre-mRNA. TREX is recruited to spliced mRNAs by a transcription-independent mechanism, binds to mRNA upstream of the exon-junction complex (EJC) and is recruited in a splicing- and cap-dependent manner to a region near the 5' end of the mRNA where it functions in mRNA export to the cytoplasm via the TAP/NFX1 pathway. Regulates transcriptional elongation of a subset of genes. Involved in genome stability by preventing co-transcriptional R-loop formation (By similarity). {ECO:0000250}., Participates in an apoptotic pathway which is characterized by activation of caspase-6, increases in the expression of BAK1 and BCL2L1 and activation of NF-kappa-B. This pathway does not require p53/TP53, nor does the presence of p53/TP53 affect the efficiency of cell killing. Activates a G2/M cell cycle checkpoint prior to the onset of apoptosis. Apoptosis is inhibited by association with RB1 (By similarity). Essential for early embryonic development. Required for normal gene expression during postnatal testis development. {ECO:0000250, ECO:0000269|PubMed:16705185, ECO:0000269|PubMed:19307311}.
Molecular Weight:	76.4 kDa Including tag.
UniProt:	Q8R3N6

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

Handling

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

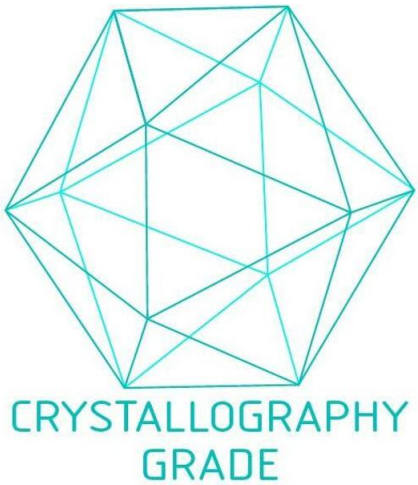

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process