

Datasheet for ABIN3095858

THO Complex 2 Protein (THOC2) (AA 1-1593) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	THO Complex 2 (THOC2)
Protein Characteristics:	AA 1-1593
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This THO Complex 2 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MAAAVVVPA EWIKNWEKSG RGEFLHLCRI LSENKSHDSS TYRDFQQALY ELSYHVIKGN LKHEQASNVL SDISEFREDM PSILADVFCI LDIETNCLEE KSKRDYFTQL VLACLYLVSD TVLKERLDPE TLESGLIKQ SQQFNQKSVK IKTKLFYKQQ KFNLLREENE GYAKLIAELG QDLGSITS LILENIKSLI GCFNLDPNRV LDVILEVFEC RPEHDDFFIS LLESYMSMCE PQTLCHILGF KFKFYQEPNG ETPSSLYRVA AVLLQFNLI LDDLYVHLLP ADNCIMDEHK REIAEAKQIV RKLTMVVLSS EKMDEREKEK EKEEEKVEKP PDNQKLGLLE ALLKIGDWQH AQNIMDQMPP YYAASHKLI LAICKLIHIT IEPLYRRVG VPKGAKGSPVN ALQNKRAPKQ AESFEDLRRD VFNMF CYLGP HLSHDPILFA KVVRIKGSFM KEFQSDGSKQ EDKEKTEVIL SCLLSITDQV LLPSLSLMDC NACMSEELWG MFKTFPYQHR YRLYGQWKNE TYN SHPLL VK VKAQTIDRAK YIMKRLTKEN VKPSGRQIGK LSHSNPTILF DYILSQIQKY DNLITPVVDS LKYL TSLNYD VLAYCIEAL ANPEKERMKH DDTTISSWLQ SLASFCGAVF RKYPIDLAGL LQYVANQLKA GKSFDLLILK EVVQKMAGIE ITEEMTMEQL EAMTGGEQLK AEGGYFGQIR
-----------	---

NTKKSSQRLK DALLDHDAL PLCLLMAQQR NGVIFQEGGE KHLKLVGKLY DQCHDTLVQF
GGFLASNLST EDYIKRVPSI DVLCNEFHTP HDAFFLSRP MYAHHISSKY DELKKSEKGS
KQQHKVHKYI TSCMVMAPV HEAVVSLHVS KVVDDISPQF YATFWSLTMY DLAVPHTSYE
REVNKLKVQM KAIDDNQEMP PNKKKKEKER CTALQDKLLE EEKKQMEHVQ RVLQRLKLEK
DNWLLAKSTK NETITKFLQL CIFPRCIFSA IDAVYCARFV ELVHQKQTPN FSTLLCYDRV
FSDIITYVAS CTENEASRYG RFLCCMLETV TRWHSDRATY EKECGNYPGF LTILRATGFD
GGNKADQLDY ENFRHVHVKW HYKLTKASVH CLETGEYTHI RNILIVLTKI LPWYPKVLNL
GQALERRVHK ICQEEKEKRP DLYALAMGYS GQLKSRKSYM IPENEFHHKD PPPRNAVASV
QNGPGGGPSS SSIGSASKSD ESSTEETDKS RERSQCGVKA VNKASSTTPK GNSSNGNSGS
NSNKAVKEND KEGKKEKEKE KKEKTPATTP EARVLGKDGG EKPKEERPKN DEKARETKER
TPKSDKEKEK FKKEEKAKDE KFKTTVPNAE SKSTQERERE KEPSRERDIA KEMKSKENVK
GGEKTPVSGS LKSPVPRSDI PEPEREQRR KIDTHPSPSH SSTVKDSLIE LKESSAKLYI
NHTPPPLSKS KEREMDKDL DKSRRSRER EKKDEKDRKE RKRDSNNDR EVPPDLTKRR
KEENGTMGVS KHKSESPCES PYPNEKDKEK NKS KSSGKEK GSDSFKSEKM DKISSGGKKE
SRHDKEKIEK KEKRDSSGGK EEKHHHKSSD KHR

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.
- Human THOC2 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

Product Details

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:	THO Complex 2 (THOC2)
Alternative Name:	THOC2 (THOC2 Products)
Background:	<p>Required for efficient export of polyadenylated RNA and spliced mRNA. 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. The TREX complex is essential for the export of Kaposi's sarcoma-associated herpesvirus (KSHV) intronless mRNAs and infectious virus production. THOC2 (and probably the THO complex) is involved in releasing mRNA from nuclear speckle domains. Required for NXF1 localization to the nuclear rim. Plays a role for proper neuronal development. {ECO:0000269 PubMed:11979277, ECO:0000269 PubMed:15833825, ECO:0000269 PubMed:15998806, ECO:0000269 PubMed:17190602, ECO:0000269 PubMed:18974867, ECO:0000269 PubMed:22893130, ECO:0000269 PubMed:23222130, ECO:0000269 PubMed:26166480}.</p>

Target Details

Molecular Weight: 183.7 kDa Including tag.

UniProt: [Q8NI27](#)

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.

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