

Datasheet for ABIN3091557

CHTOP Protein (AA 2-248) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	CHTOP
Protein Characteristics:	AA 2-248
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CHTOP protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	AAQSAPKVVL KSTTKMSLNE RFTNMLKNKQ PTPVNIRASM QQQQLASAR NRRLAQQMEN RPSVQAALKL KQSLKQRLGK SNIQARLGRP IGALARGAIG GRGLPIIQRG LPRGGLRGGR ATRTLLRGGM SLRGQNLLRG GRAVAPRMGL RRGGVRGRGG PGRGGLRGGA MGRGGIGGRG RGMIGRGRGG FGGRGRGRGR GRGALARPVL TKEQLDNQLD AYMSKTKGHL DAELDAYMAQ TDPETND Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.
Characteristics:	<ul style="list-style-type: none"> Made in Germany - from design to production - by highly experienced protein experts. Human CHTOP Protein (raised in E. Coli) purified by multi-step, protein-specific process to ensure crystallization grade. State-of-the-art algorithm used for plasmid design (Gene synthesis). <p>This protein is a made to order protein and will be made for the first time for your order. Our</p>

Product Details

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 bacterial culture: 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:	Endotoxin has not been removed. Please contact us if you require endotoxin removal.
Grade:	Crystallography grade

Target Details

Target:	CHTOP
Alternative Name:	CHTOP (CHTOP Products)
Background:	Plays an important role in the ligand-dependent activation of estrogen receptor target genes (PubMed:19858291). May play a role in the silencing of fetal globin genes (PubMed:20688955).

Target Details

Recruits the 5FMC complex to ZNF148, leading to desumoylation of ZNF148 and subsequent transactivation of ZNF148 target genes (By similarity). Plays an important role in the tumorigenicity of glioblastoma cells. Binds to 5-hydroxymethylcytosine (5hmC) and associates with the methylosome complex containing PRMT1, PRMT5, MEP50 and ERH. The CHTOP-methylosome complex associated with 5hmC is recruited to selective sites on the chromosome, where it methylates H4R3 and activates the transcription of genes involved in glioblastomagenesis (PubMed:25284789). {ECO:0000250|UniProtKB:Q9CY57, ECO:0000269|PubMed:19858291, ECO:0000269|PubMed:20688955, ECO:0000269|PubMed:25284789}., Required for effective mRNA nuclear export and is a component of the TREX complex which is thought to couple mRNA transcription, processing and nuclear export, and 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. Stimulates DDX39B ATPase and helicase activities. In cooperation with ALYREF/THOC4 enhances NXF1 RNA binding activity (PubMed:23299939). {ECO:0000269|PubMed:23299939}.

Molecular Weight: 27.2 kDa Including tag.

UniProt: [Q9Y3Y2](#)

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