

Datasheet for ABIN3096425 YTHDC1 Protein (AA 1-727) (His tag)



[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	YTHDC1
Protein Characteristics:	AA 1-727
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This YTHDC1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MAADSREEKD GELNVLDDIL TEVPEQDDEL YNPESEQDKN EKKGSKRKSD RMESTDTKRQ KPSVHSRQLV SKPLSSSVSN NKRIVSTKGK SATEYKNEEY QRSERNKRLD ADRKIRLSSS ASREPYKNQP EKTCVRKRDP ERRAKSPTPD GSERIGLEVD RRASRSSQSS KEEVNSEEYG SDHETGSSGS SDEQGNNTEN EEEGVEEDVE EDEEVEEDAE EDEEVEDEDGE EEEEEEEEE EEEEEEEEEEY EQDERDQKEE GNDYDTRSEA SDSGSESVSF TDGSVRSGSG TDGSDEKKKE RKRARGISPI VFDRSGSSAS ESYAGSEKKH EKLSSSVRAV RKDQTSKLY VLQDARFFLI KSNHENVSL AKAKGVWSTL PVNEKKLNLA FRSARSVILI FSVRESGKFQ GFARLSSESH HGGSPIHWVL PAGMSAKMLG GVFKIDWICR RELPFTKSAH LTNPWNEHKP VKIGRDGQEI ELECTQLCL LFPPDESIDL YQVIHKMRHK RRMHSQPRSR GRPSRREPVR DVGRRRPEDY DIHNSRKKPR IDYPPEFHQR PGYDKDPYQ EVDRRFSGVR RDVFLNGSYN DYVREFHNMG PPPPWQGMPP YPGMEQPPHH PYYQHHAPPP QAHPYSGHH PVPHEARYRD KRVHDYDMRV DDFLRRTQAV VSGRRSRPRE RDRERERDRP RDNRRDRERD RGRDRERERE RLCDRDRDRG
-----------	--

ERGRYRR

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 YTHDC1 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.

Product Details

Grade: Crystallography grade

Target Details

Target: YTHDC1

Alternative Name: YTHDC1 ([YTHDC1 Products](#))

Background: Regulator of alternative splicing that specifically recognizes and binds N6-methyladenosine (m6A)-containing RNAs (PubMed:26318451, PubMed:26876937, PubMed:25242552). M6A is a modification present at internal sites of mRNAs and some non-coding RNAs and plays a role in the efficiency of mRNA splicing, processing and stability (PubMed:26318451, PubMed:25242552). Acts as a key regulator of exon-inclusion or exon-skipping during alternative splicing via interaction with mRNA splicing factors SRSF3 and SRSF10 (PubMed:26876937). Specifically binds m6A-containing mRNAs and promotes recruitment of SRSF3 to its mRNA-binding elements adjacent to m6A sites, leading to exon-inclusion during alternative splicing (PubMed:26876937). In contrast, interaction with SRSF3 prevents interaction with SRSF10, a splicing factor that promotes exon skipping: this prevents SRSF10 from binding to its mRNA-binding sites close to m6A-containing regions, leading to inhibit exon skipping during alternative splicing (PubMed:26876937). May also regulate alternative splice site selection (PubMed:20167602). {ECO:0000269|PubMed:20167602, ECO:0000269|PubMed:25242552, ECO:0000269|PubMed:26318451, ECO:0000269|PubMed:26876937}.

Molecular Weight: 85.7 kDa Including tag.

UniProt: [Q96MU7](#)

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