

Datasheet for ABIN3096087  
**ZCCHC11 Protein (AA 1-1644) (Strep Tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	1 mg
Target:	ZCCHC11
Protein Characteristics:	AA 1-1644
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ZCCHC11 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Sequence:	MEESKTLKSE NHEPKKNVIC EESKAVQVIG NQTLKARNDK SVKEIENSSP NRNSSKKNKQ NDICIEKTEV KSCKVNAANL PGPKDLGLVL RDQSHCKAKK FPNSPVKA EK ATISQAKSEK ATSLQAKAEK SPKSPNSVKA EKASSYQMKSEKVPSSPAEA EKGPSLLKDK MRQKTELQQI GKKIPSSFTS VDKVNIEAVG GEKCALQNSP RSQKQQTCTD NTGDSDDAS GIEDVSDDL KMKNDENKE NSSEMDYLEN ATVIDESALT PEQRLGLKQA EERLERDHIF RLEKRSPEYT NCRYLCKLCL IHENIQGAH KHIKEKRHHK NILEKQEESE LRSLPPPSPA HLAALSVAVI ELAKEHGITD DDLRVRQEIV EEMSKVITTF LPECSLRLYG SSLTRFALKS SDVNIDIKFP PKMNHPDLLI KVLGILKKNV LYVDVESDFH AKVPVVVCRD RKSGLLCRVS AGNDMACLT DLLTALGKIE PVFIPLVLAF RYWAKLCYID SQTGGGIPSY CFALMVMFFL QQRKPPLPC LLGSWIEGFD PKRMDDFQLK GIVEEKFKW ECNSSSATEK NSIAEENKAK ADQPKDDTKK TETDNQSNAM KEKHGKSPLA LETPNRVSLG QLWLELLKFY TLDFALEEYV ICVRIQDILT RENKNWPKRR IAIEDPFSVK RNVARSLNSQ LVYEVVERF RAAVRYFACP QTKGGNKSTV
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DFKKREKGKI SNKKPVKSNN MATNGCILLG ETTEKINAER EQPVQCDEMD CTSQRCIIDN  
NNLLVNELDF ADHGQDSSSL STSKSSEIEP KLDKKQDDLA PSETCLKKEL SQCNCLDSK  
SPDPDKSTGT DCRSNLETES SHQSVCTDTS ATSCNCKATE DASDLNDDDN LPTQELYVVF  
DKFILTSGKP PTIVCSICKK DGHSKNDCPE DFRKIDLKPL PPMTNRFREI LDLVCKRCFD  
ELSPPCSEQH NREQILIGLE KFIQKEYDEK ARLCLFGSSK NGFGFRDSDL DICMTLEGHE  
NAEKLNCKEI IENLAKILKR HPGLRNILPI TTAKVPIVKF EHRRSGLEGD ISLYNTLAQH  
NTRMLATYAA IDPRVQYLG YTMKVFAKRC D IGDA SRGSL SYAYILMVLY FLQQRKPPVI  
PVLQEIFDGK QIPQRMVDGW NAFFFDKTEE LKKRLPSLGK NTESLGELWL GLLRFYTEEF  
DFKEYVISIR QKKLLTTFEK QWTSKCIAIE DPFDLNHNLG AGVSRKMTNF IMKAFINGRK  
LFGTPFYPLI GREAEYFFDS RVLTDGELAP NDRCCRVCGK IGHYMKDCPK RKSLLFRLKK  
KDSEEEKEGN EEEKDSRDVL DPRDLH DTRD FRDPRDLRCF ICGDAGHVRR ECPEVKLARQ  
RNSSVAAAQL VRNLVNAQQV AGSAQQQGDQ SIRTRQSSEC SESPSYSPQP QPFPQNSSQS  
AAITQPSSQP GSQPKLGPPQ QGAQPPHQVQ MPLYNFPQSP PAQYSPMHNM GLLPMHPLQI  
PAPSWPIHGP VIHSAPGSAP SNIGLNDPSI IFAQPAARPV AIPNTSHDGH WPRTVAPNSL  
VNSGAVGNSE PGFRGLTPPI PWEHAPRPHF PLVPASWPYG LHQNFMHQGN ARFQPNKPFY  
TQDRCATRRC RERCPHPPRG NVSE

**Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to

## Product Details

produce even the most difficult-to-express proteins, including those that require post-translational modifications.

- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

### Concentration:

- 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.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):  1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

## Target Details

Target:	ZCCHC11
Alternative Name:	TUT4 ( <a href="#">ZCCHC11 Products</a> )
Background:	Terminal uridylyltransferase 4 (TUTase 4) (EC 2.7.7.52) (Zinc finger CCHC domain-containing protein 11),FUNCTION: Uridylyltransferase that mediates the terminal uridylation of mRNAs with short (less than 25 nucleotides) poly(A) tails, hence facilitating global mRNA decay (PubMed:25480299, PubMed:31036859). Essential for both oocyte maturation and fertility. Through 3' terminal uridylation of mRNA, sculpts, with TUT7, the maternal transcriptome by eliminating transcripts during oocyte growth (By similarity). Involved in microRNA (miRNA)-

Target Details

induced gene silencing through uridylation of deadenylated miRNA targets. Also functions as an integral regulator of microRNA biogenesis using 3 different uridylation mechanisms (PubMed:25979828). Acts as a suppressor of miRNA biogenesis by mediating the terminal uridylation of some miRNA precursors, including that of let-7 (pre-let-7), miR107, miR-143 and miR-200c. Uridylated miRNAs are not processed by Dicer and undergo degradation. Degradation of pre-let-7 contributes to the maintenance of embryonic stem (ES) cell pluripotency (By similarity). Also catalyzes the 3' uridylation of miR-26A, a miRNA that targets IL6 transcript. This abrogates the silencing of IL6 transcript, hence promoting cytokine expression (PubMed:19703396). In the absence of LIN28A, TUT7 and TUT4 monouridylate group II pre-miRNAs, which includes most of pre-let7 members, that shapes an optimal 3' end overhang for efficient processing (PubMed:25979828). Adds oligo-U tails to truncated pre-miRNAs with a 5' overhang which may promote rapid degradation of non-functional pre-miRNA species (PubMed:25979828). May also suppress Toll-like receptor-induced NF-kappa-B activation via binding to T2BP (PubMed:16643855). Does not play a role in replication-dependent histone mRNA degradation (PubMed:18172165). Due to functional redundancy between TUT4 and TUT7, the identification of the specific role of each of these proteins is difficult (PubMed:25979828, PubMed:25480299, PubMed:16643855, PubMed:19703396, PubMed:18172165) (By similarity). TUT4 and TUT7 restrict retrotransposition of long interspersed element-1 (LINE-1) in cooperation with MOV10 counteracting the RNA chaperone activity of L1RE1. TUT7 uridylates LINE-1 mRNAs in the cytoplasm which inhibits initiation of reverse transcription once in the nucleus, whereas uridylation by TUT4 destabilizes mRNAs in cytoplasmic ribonucleoprotein granules (PubMed:30122351).

{ECO:0000250|UniProtKB:B2RX14, ECO:0000269|PubMed:16643855, ECO:0000269|PubMed:18172165, ECO:0000269|PubMed:19703396, ECO:0000269|PubMed:25480299, ECO:0000269|PubMed:25979828, ECO:0000269|PubMed:30122351, ECO:0000269|PubMed:31036859}.

Molecular Weight:	185.2 kDa
UniProt:	<a href="#">Q5TAX3</a>
Pathways:	<a href="#">Stem Cell Maintenance</a>

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.
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## Application Details

Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!</p>
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
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