

Datasheet for ABIN3135169
ZCCHC6 Protein (AA 1-1491) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	ZCCHC6
Protein Characteristics:	AA 1-1491
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ZCCHC6 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MGDTAKPYFV KRTKDRGIID DDDFRRGHPQ QDYLMDDYA KGHSSKMEKG LPKKKISPGN YGNTPRKGLY GVSSNPYAFK NPIYSQPAWM NDNHKDQNKK WLSDELAGNA DSWREFKPGP RIPVISRSRK ESFQESDDAY RWQEGRCRA VRRLFQKDLS SLEAMSEMEA GSPENKKQRS RPRKPRTRT EDSEQDGLD GPVIDESVLS TKELLGLQQA EERLKRDCID RLKRRPRNCP TAKYTCKLCD ALIDSIPFAH KHIKEKRHKK NLKEKQEEEL LTTLPPPAPS QIHAVGSAID RVVQEFGLHS ENLDQRLEIK RVMESVFRHK LPDCSLRLYG SSSCSRLGFRD SDVNIDVQFP AVMSQPDVLL LVQECLKNSD SFIDVDADFH ARVPVVVCRD KQSGLLCKVS AGNENAWLTT KHLTALGKLE PRLVPLVIAF RYWAKLCSID RPEEGGLPPY VFALMAVFFL QQRKEPLLPV YLGSWIEEFS LNKLGNFSLK DVEKDSVWVE YTDNSTGDTS SAKEEAPKET AAKKGQVPLT FNIKHQPSVP VGQLWVELLR FYALEFNLAD LVISIRVKEL ISRESKDWP KRIAIEDPYS VKRNVARTLN NQPVFYILH CLRTTYKYFA LPHKVTKPNL TKPPSPVTCV SDPYREAKNG

GPEPQATNID KLGNAAVAQD PGVQTSGDCR AQLVTLKNTT EEVGSPAKEK TGGVHIPAHQ
ESSGCVQAEV SCEGLEDATA ELPETGSDNE EVRRKTKHPL STDDQGLSSS KHPQLQNCGS
LCGLQADNTL ELVAEECNCS ASLDNKAEVN EERIEGAEEL EAAAALSCFS PSVQSRTSAA
MHFDDEEEEEE EEEEEEPRL SINLTEDEEG VANEHQVDSR YAGSGEEDAL SEEDDLAEP
KGEDTGECE NVGGTLLIDL NRITLKEESF PEEDLPGDQS EFFYEFKLT FTKGKSPTVV
CSLCKREGHL KKDCPEDFKR VQLEPLPLT PKFSNILDQV CVQCYKDFSP TIVEDQAREH
IRQNLESFIK QDFPGTKLSL FGSSKNGFGF KQSDLDVCMT INGHETAEGL DCVRTIEELA
RVLKHSGLR NILPITAKV PIVKFFHLRS GLEVDISLYN TLALHNTRLL SAYSIDPRV
KYLCYTMKVF TKMCDIGDAS RGSLSYAYT LMVLYFLQQR SPPVIPVLQE IYKGEKKPEI
LVDGWNIFYFF DQINELPTCW PEYGKNTPEV GQLWLGLLRF YTEEFDFKEH VISIRKSL
TTFKKQWTSK YIVIEDPFDL NHNLGAGLSR KMTNFIMKAF INGRRVFGIP VKGFPKDNPS
KLAYFFDPDV LTEGELAPND RCCRICGKIG HFMKDCPMRR KVRRRRDQED TPNQRYSESK
EKRSKEDKEI QNKYTEKEVS TKEDKLTPCA AAKAKPVRAA VDLGREKLLR TPTEKWKQRD
DRDSREKRCF ICGREGHIKK ECPQFKGSPG SLSSKYMTQG RASVKRTQQE S

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 in one-step affinity chromatography
- 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 try to ensure that you receive soluble 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 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

Product Details

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 against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	ZCCHC6
Alternative Name:	Tut7 (ZCCHC6 Products)
Background:	<p>Terminal uridylyltransferase 7 (TUTase 7) (EC 2.7.7.52) (Zinc finger CCHC domain-containing protein 6),FUNCTION: Uridylyltransferase that mediates the terminal uridylation of mRNAs with short (less than 25 nucleotides) poly(A) tails, hence facilitating global mRNA decay (PubMed:28792939). 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 (PubMed:28792939). Involved in microRNA (miRNA)-induced gene silencing through uridylation of deadenylated miRNA targets. Also acts as a suppressor of miRNA biogenesis by mediating the terminal uridylation of miRNA precursors, including that of let-7 (pre-let-7) (PubMed:22898984). Uridylated pre-let-7 RNA is not processed by Dicer and undergo degradation. Pre-let-7 uridylation is strongly enhanced in the presence of LIN28A. Due to functional redundancy between ZCCHC6 and ZCCHC11, the identification of the specific role of each of these proteins is difficult (By similarity) (PubMed:22898984). Involved in microRNA (miRNA)-induced gene silencing through uridylation of deadenylated miRNA targets (By similarity). Also functions as an integral regulator of microRNA biogenesis using 3 different uridylation mechanisms (By similarity). Acts as a suppressor of miRNA biogenesis by mediating</p>

Target Details

the terminal uridylation of some miRNA precursors, including that of let-7 (pre-let-7). Uridylated pre-let-7 RNA is not processed by Dicer and undergo degradation. Pre-let-7 oligouridylation is strongly enhanced in the presence of LIN28A (PubMed:22898984). 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 (By similarity). Add oligo-U tails to truncated pre-miRNAs with a 5' overhang which may promote rapid degradation of non-functional pre-miRNA species (By similarity). Does not play a role in replication-dependent histone mRNA degradation (By similarity). Due to functional redundancy between TUT4 and TUT7, the identification of the specific role of each of these proteins is difficult (PubMed:28792939, PubMed:22898984). 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 (By similarity). {ECO:0000250|UniProtKB:Q5VYS8, ECO:0000269|PubMed:22898984, ECO:0000269|PubMed:28792939}.

Molecular Weight: 169.1 kDa

UniProt: [Q5BLK4](#)

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: 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 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!

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months