

Datasheet for ABIN7563798 **ZCCHC6 Protein (AA 1-1491) (His tag)**



Overview

Quantity:	1 mg
Target:	ZCCHC6
Protein Characteristics:	AA 1-1491
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ZCCHC6 protein is labelled with His tag.

Product Details

1 Todaot Betano	
Purpose:	Custom-made recombinant Tut7 Protein expressed in mammalian cells.
Sequence:	MGDTAKPYFV KRTKDRGIID DDDFRRGHPQ QDYLIMDDYA KGHSSKMEKG LPKKKISPGN
	YGNTPRKGLY GVSSNPYAFK NPIYSQPAWM NDNHKDQNKK WLSDELAGNA DSWREFKPGP
	RIPVISRSRK ESFQESDDAY RWQEGRGCRA VRRLFQKDLS SLEAMSEMEA GSPENKKQRS
	RPRKPRRTRT EDSEQDGDLD GPVIDESVLS TKELLGLQQA EERLKRDCID RLKRRPRNCP
	TAKYTCKLCD ALIDSIPFAH KHIKEKRHKK NLKEKQEEEL LTTLPPPAPS QIHAVGSAID
	RVVQEFGLHS ENLDQRLEIK RVMESVFRHK LPDCSLRLYG SSCSRLGFRD SDVNIDVQFP
	AVMSQPDVLL LVQECLKNSD SFIDVDADFH ARVPVVVCRD KQSGLLCKVS AGNENAWLTT
	KHLTALGKLE PRLVPLVIAF RYWAKLCSID RPEEGGLPPY VFALMAVFFL QQRKEPLLPV
	YLGSWIEEFS LNKLGNFSLK DVEKDSVVWE YTDNSTGDTS SAKEEAPKET AAKKGQVPLT
	FNIKHQPSVP VGQLWVELLR FYALEFNLAD LVISIRVKEL ISRESKDWPK KRIAIEDPYS
	VKRNVARTLN NQPVFEYILH CLRTTYKYFA LPHKVTKPNL TKPPSPVTCV SDPYREAKNG
	GPEPQATNID KLGNAAVAQD PGVQTSGDCR AQLVTLKNTT EEVGSPAKEK TGGVHIPAHQ

ESSGCVQAEV SCEGLEDATA ELPETGSDNE EVRRKTKHPL STDDQGLSSS KHPELQNCGS LCGLQADNTL ELVAEECNSC ASLDNKAEVN EERIEGAEEL EEAAALSCFS PSVQSRTSAA MHFDDEEEE EEEEEEPRL SINLTEDEEG VANEHQVDSR YAGSGEEDAL SEEDDLAEPA KGEDTGECGE NVGGTLLIDL NRITLKEESF PEEDLPGDQS EFFYEFRKLT FTKGKSPTVV CSLCKREGHL KKDCPEDFKR VQLEPLPPLT PKFSNILDQV CVQCYKDFSP TIVEDQAREH IRQNLESFIK QDFPGTKLSL FGSSKNGFGF KQSDLDVCMT INGHETAEGL DCVRTIEELA RVLRKHSGLR NILPITTAKV PIVKFFHLRS GLEVDISLYN TLALHNTRLL SAYSAIDPRV KYLCYTMKVF TKMCDIGDAS RGSLSSYAYT LMVLYFLQQR SPPVIPVLQE IYKGEKKPEI LVDGWNIYFF DQINELPTCW PEYGKNTEPV GQLWLGLLRF YTEEFDFKEH VISIRRKSLL TTFKKQWTSK YIVIEDPFDL NHNLGAGLSR KMTNFIMKAF INGRRVFGIP VKGFPKDNPS KLAYFFDPDV LTEGELAPND RCCRICGKIG HFMKDCPMRR KVRRRRDQED TPNQRYSESK EKRSKEDKEI QNKYTEKEVS TKEDKLTPCA AAKAKPVRAA VDLGREKLLR TPTEKWKRQD DRDSREKRCF ICGREGHIKK ECPQFKGSPG SLSSKYMTQG RASVKRTQQE S Sequence without tag. The proposed Purification-Tag is based on experiences 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.

Specificity:

If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

Target: ZCCHC6

Alternative Name: Tut7 (ZCCHC6 Products)

Background:

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 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 nonfunctional 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 chaperonne 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:

O5BLK4

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition 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:	12 months