Datasheet for ABIN7555863

ZCCHC11 Protein (AA 1-1644) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	ZCCHC11
Protein Characteristics:	AA 1-1644
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ZCCHC11 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant TUT4 Protein expressed in mammalian cells.
Sequence:	MEESKTLKSE NHEPKKNVIC EESKAVQVIG NQTLKARNDK SVKEIENSSP NRNSSKKNKQ NDICIEKTEV KSCKVNAANL PGPKDLGLVL RDQSHCKAKK FPNSPVKAEK ATISQAKSEK ATSLQAKAEK SPKSPNSVKA EKASSYQMKS EKVPSSPAEA EKGPSLLLKD MRQKTELQQI GKKIPSSFTS VDKVNIEAVG GEKCALQNSP RSQKQQTCTD NTGDSDDSAS GIEDVSDDLS KMKNDESNKE NSSEMDYLEN ATVIDESALT PEQRLGLKQA EERLERDHIF RLEKRSPEYT NCRYLCKLCL IHIENIQGAH KHIKEKRHKK NILEKQEESE LRSLPPPSPA HLAALSVAVI ELAKEHGITD DDLRVRQEIV EEMSKVITTF LPECSLRLYG SSLTRFALKS SDVNIDIKFP PKMNHPDLLI KVLGILKKNV LYVDVESDFH AKVPVVVCRD RKSGLLCRVS AGNDMACLTT DLLTALGKIE PVFIPLVLAF RYWAKLCYID SQTDGGIPSY CFALMVMFFL QQRKPPLLPC LLGSWIEGFD PKRMDDFQLK GIVEEKFVKW ECNSSSATEK NSIAEENKAK ADQPKDDTKK TETDNQSNAM KEKHGKSPLA LETPNRVSLG QLWLELLKFY TLDFALEEYV ICVRIQDILT RENKNWPKRR IAIEDPFSVK RNVARSLNSQ LVYEYVVERF RAAYRYFACP QTKGGNKSTV

	DFKKREKGKI SNKKPVKSNN MATNGCILLG ETTEKINAER EQPVQCDEMD CTSQRCIIDN NNLLVNELDF ADHGQDSSSL STSKSSEIEP KLDKKQDDLA PSETCLKKEL SQCNCIDLSK SPDPDKSTGT DCRSNLETES SHQSVCTDTS ATSCNCKATE DASDLNDDDN LPTQELYYVF DKFILTSGKP PTIVCSICKK DGHSKNDCPE DFRKIDLKPL PPMTNRFREI LDLVCKRCFD ELSPPCSEQH NREQILIGLE KFIQKEYDEK ARLCLFGSSK NGFGFRDSDL DICMTLEGHE NAEKLNCKEI IENLAKILKR HPGLRNILPI TTAKVPIVKF EHRRSGLEGD ISLYNTLAQH NTRMLATYAA IDPRVQYLGY TMKVFAKRCD IGDASRGSLS SYAYILMVLY FLQQRKPPVI PVLQEIFDGK QIPQRMVDGW NAFFFDKTEE LKKRLPSLGK NTESLGELWL GLLRFYTEEF DFKEYVISIR QKKLLTTFEK QWTSKCIAIE DPFDLNHNLG AGVSRKMTNF IMKAFINGRK LFGTPFYPLI GREAEYFFDS RVLTDGELAP NDRCCRVCGK IGHYMKDCPK RKSLLFRLKK KDSEEEKEGN EEEKDSRDVL DPRDLHDTRD 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 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.

Product Details

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

Target Details

Target:	ZCCHC11
Alternative Name:	TUT4 (ZCCHC11 Products)
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)-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 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 (PubMed:30122351).

Target Details

	{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:	Q5TAX3
Pathways:	Stem Cell Maintenance

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