

Datasheet for ABIN3094903

RC3H1 Protein (AA 1-1133) (Strep Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	RC3H1
Protein Characteristics:	AA 1-1133
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RC3H1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MPVQAPQWTD FLSCPICTQT FDETIRKPIS LGCGHTVCKM CLNKLHRKAC PFDQTTINTD IELLPVNSAL LQLVGAQVPE QQPITLCSGV EDTKHYYEAK KCVEELALYL KPLSSARGVG LNSTTQSVLS RPMQRKLVTL VHCQLVEEEG RIRAMRAARS LGERTVTELI LQHQNPPQLS SNLWAAVRAR GCQFLGPAMQ EEALKLVLLA LEDGSALS RK VLVLFFVQRL EPRFPQASKT SIGHVVQLLY RASCFKVTKR DEDSSLMQLK EEFRTYEALR REHDSQIVQI AMEAGLRIAP DQWSSLLYGD QSHKSHMQSI IDKLQTPASF AQSVQELTIA LQRTGDPANL NRLRPHLELL ANIDPSPDAP PPTWEQLENG LVAVRTVVHG LVDYIQNH SK KGADQQQPPQ HSKYKTYMCR DMKQRGGCPR GASCTFAHSQ EELEKFRKMN KRLVPRRPLS ASLGQLNEVG LPSAAILPDE GAVDLPSRKP PALPNGIVST GNTVTQLIPR GTDPSYDSSL KPGKIDHLSS SAPGSPPDLL ESVPKSISAL PVNPHSIPPR GPADLPMPV TKPLQMVPRG SQLYPAQQT D VYYQDPRGAA PPFEPAPYQQ GMYTTPPPQC VSRFVRPPPS APEPAPPYLD HYPPYLQERV VNSQYGTQPQ QYPPIYPSHY DGRRVYPAPS YTREEIFRES PIPIEIPPA VPSYVPESRE RYQQIESYYP
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VAPHPTQIRP SYLREPPYSR LPPPPQPHPS LDELHRRRKE IMAQLEERKV ISPPPFAPSP
TLPPTFHPEE FLDEDLKVAG KYKGNDSYQY SPWSCDTIGS YIGTKDAKPK DVVAAGSVEM
MNVESKGMRD QRLDLQRRAA ETSDDDLIPF GDRPTVSRFG AISRTSKTIY QGAGPMQAMA
PQGAPTKSIN ISDYSPYGTH GGWGASPYSP HQNIPSQGHF SERERISMSE VASHGKPLPS
AEREQLRELE QQLNHQISQQ TQLRGLEAVS NRLVLQREAN TLAGQSQPPP PPPPKWPGMI
SSEQLSLELH QVEREIGKRT RELSMENQCS LDMKSKLNTS KQAENGQPEP QNKVPAEDLT
LTFSDVPNGS ALTQENISLL SNKTTSSLNLS EDPEGGGDNN DSQRSGVTPS SAP

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 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:

Product Details

- 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:	RC3H1
Alternative Name:	RC3H1 (RC3H1 Products)
Background:	Roquin-1 (Roquin) (EC 2.3.2.27) (RING finger and C3H zinc finger protein 1) (RING finger and CCH-type zinc finger domain-containing protein 1) (RING finger protein 198),FUNCTION: Post-transcriptional repressor of mRNAs containing a conserved stem loop motif, called constitutive decay element (CDE), which is often located in the 3'-UTR, as in HMGXB3, ICOS, IER3, NFKBID, NFKBIZ, PPP1R10, TNF, TNFRSF4 and in many more mRNAs (PubMed:25026078, PubMed:31636267). Cleaves translationally inactive mRNAs harboring a stem-loop (SL), often located in their 3'-UTRs, during the early phase of inflammation in a helicase UPF1-independent manner (By similarity). Binds to CDE and promotes mRNA deadenylation and degradation. This process does not involve miRNAs (By similarity). In follicular helper T (Tfh) cells, represses of ICOS and TNFRSF4 expression, thus preventing spontaneous Tfh cell differentiation, germinal center B-cell differentiation in the absence of immunization and autoimmunity (By similarity). In resting or LPS-stimulated macrophages, controls inflammation by suppressing TNF expression (By similarity). Also recognizes CDE in its own mRNA and in that of paralogous RC3H2, possibly leading to feedback loop regulation (By similarity). Recognizes and binds mRNAs containing a hexaloop stem-loop motif, called alternative decay element (ADE) (By similarity). Together with

Target Details

ZC3H12A, destabilizes TNFRSF4/OX40 mRNA by binding to the conserved stem loop structure in its 3'UTR (By similarity). Able to interact with double-stranded RNA (dsRNA) (PubMed:25504471, PubMed:25026078). miRNA-binding protein that regulates microRNA homeostasis. Enhances DICER-mediated processing of pre-MIR146a but reduces mature MIR146a levels through an increase of 3' end uridylation. Both inhibits ICOS mRNA expression and they may act together to exert the suppression (PubMed:25697406, PubMed:31636267). Acts as a ubiquitin E3 ligase. Pairs with E2 enzymes UBE2A, UBE2B, UBE2D2, UBE2F, UBE2G1, UBE2G2 and UBE2L3 and produces polyubiquitin chains (PubMed:26489670). Shows the strongest activity when paired with UBE2N:UBE2V1 or UBE2N:UBE2V2 E2 complexes and generate both short and long polyubiquitin chains (PubMed:26489670). {ECO:0000250|UniProtKB:Q4VGL6, ECO:0000269|PubMed:25026078, ECO:0000269|PubMed:25504471, ECO:0000269|PubMed:25697406, ECO:0000269|PubMed:26489670, ECO:0000269|PubMed:31636267}.

Molecular Weight: 125.7 kDa

UniProt: [Q5TC82](#)

Pathways: [Ribonucleoprotein Complex Subunit Organization, Activated T Cell Proliferation](#)

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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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