

# Datasheet for ABIN7562787 RC3H2 Protein (AA 1-1187) (His tag)



# Overview

Quantity:	1 mg
Target:	RC3H2
Protein Characteristics:	AA 1-1187
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RC3H2 protein is labelled with His tag.

# **Product Details**

Purpose:	Custom-made recombinant Rc3h2 Protein expressed in mammalian cells.
Sequence:	MPVQAAQWTE FLSCPICYNE FDENVHKPIS LGCSHTVCKT CLNKLHRKAC PFDQTAINTD
	IDVLPVNFAL LQLVGAQVPD HQSIKLSNLG ENKHYEVAKK CVEDLALYLK PLSGGKGVAS
	LNQSALSRPM QRKLVTLVNC QLVEEEGRVR AMRAARSLGE RTVTELILQH QNPQQLSANL
	WAAVRARGCQ FLGPAMQEEA LKLVLLALED GSALSRKVLV LFVVQRLEPR FPQASKTSIG
	HVVQLLYRAS CFKVTKRDED SSLMQLKEEF RSYEALRREH DAQIVHIAME AGLRISPEQW
	SSLLYGDLAH KSHMQSIIDK LQSPESFAKS VQELTIVLQR TGDPANLNRL RPHLELLANI
	DPNPDAVSPT WEQLENAMVA VKTVVHGLVD FIQNYSRKGH ETPQPQPNSK YKTSMCRDLR
	QQGGCPRGTN CTFAHSQEEL EKYRLRNKKM SATVRTFPLL NKVGVNSTVT TTAGNVISVI
	GSTETTGKIV ASTNGISNTE SSVSQLIPRG TDSAVRTLET VKKVGKVGTN AQNAGPSAES
	VSENKIGSPP KTPVSNAAAT SAGPSNFGTE LNSLPPKSSP FLTRVPVYPQ HSESIQYFQD
	PRTQIPFEVP QYPQTGYYPP PPTVPAGVTP CVPRFVRSSN VPESSLPPAS MPYADHYSTF
	SPRDRMNSSP YQPPPPQQYG PVPPVPSGMY APVYDSRRIW RPAMYQRDDI IRSNSLPPMD

VMHSSVYQTS LRERYNSLDG YYSVACQPPN DPRTTVPLPR EPCGHLKTSC EEQLRRKPDQ
WTQYHTQKTP VSSTLPVATQ SPTPPSPLFS VDFRSDFSES VSGAKFEEDH LSHYSPWSCG
TIGSCINAID SEPKDVIANS NAVLMDLDSG DVKRRVHLFE AQRRTKEEDP IIPFSDGPII
SKWGAISRSS RTGYHTTDPV QATASQGSAT KPISVSDYVP YVNAVDSRWS SYGNDATSSA
HYIERDRFIV TDLSGHRKHS STGDLLSIEL QQAKSNSLLL QREANALAMQ QKWNSLDEGR
HLTLNLLSKE IELRNGENDY TEDTVDTKPD RDIELELSAL DTDEPDGQSE QIEEILDIQL
GISSQNDQLL NGTAVENGHP AQQHQKDPGK PKRQSLGEDH VILEEQKPIL PVTSCFSQPR
PMSISSASCL PITTSVSVGN LILKTHVMSE DKNDFLKPIA NGKMVNS 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: RC3H2

Alternative Name: Rc3h2 (RC3H2 Products)

Background:

Roquin-2 (EC 2.3.2.27) (Membrane-associated nucleic acid-binding protein) (RING finger and CCCH-type zinc finger domain-containing protein 2) (RING-type E3 ubiquitin transferase Roquin-2), 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 and in many more mRNAs. Binds to CDE and promotes mRNA deadenylation and degradation. This process does not involve miRNAs (PubMed:23663784). 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. In resting or LPS-stimulated macrophages, controls inflammation by suppressing TNF expression. Also recognizes CDE in its own mRNA and in that of paralogous RC3H1, possibly leading to feedback loop regulation (PubMed:23583643, PubMed:23583642). Inhibits cooperatively with ZC3H12A the differentiation of helper T cells Th17 in lungs. They repress target mRNA encoding the Th17 cell-promoting factors IL6, ICOS, REL, IRF4, NFKBID and NFKBIZ. The cooperation requires RNA-binding by RC3H1 and the nuclease activity of ZC3H12A (PubMed:25282160). miRNAbinding 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). Acts as a ubiquitin E3 ligase. Pairs with E2 enzymes UBE2B, UBE2D2, UBE2E2, UBE2E3, UBE2G2, UBE2K and UBE2Q2 and produces polyubiquitin chains. Shows the strongest activity when paired with UBE2N:UBE2V1 or UBE2N:UBE2V2 E2 complexes and generate both short and long polyubiquitin chains. Involved in the ubiquitination of MAP3K5 (By similarity). Able to interact with double-stranded RNA (dsRNA). {ECO:0000250|UniProtKB:Q9HBD1, ECO:0000269|PubMed:23583642, ECO:0000269|PubMed:23583643, ECO:0000269|PubMed:23663784, ECO:0000269|PubMed:25282160, ECO:0000269|PubMed:25697406}.

Molecular Weight:

131.3 kDa

UniProt:

P0C090

## **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