

Product datasheet for **SC316865**

RC3H2 (NM_001100588) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	RC3H2
Synonyms:	MNAB; RNF164
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC316865 representing NM_001100588. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAAATTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTG
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 TACAAGGATGACGACGATAAGGTTTAAACGCGCCGC

Restriction Sites:

SgfI-MluI

ACCN:

NM_001100588

Insert Size:

3576 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation:

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components:

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min.
	2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
	3. Close the tube and incubate for 10 minutes at room temperature.
	4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
	5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001100588.1</u>
RefSeq Size:	3991 bp
RefSeq ORF:	3576 bp
Locus ID:	54542
UniProt ID:	<u>Q9HBD1</u>
Cytogenetics:	9q33.2
Protein Families:	Druggable Genome
MW:	131.7 kDa

Gene Summary:

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. 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 (By similarity). 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). Acts as a ubiquitin E3 ligase. Pairs with E2 enzymes UBE2B, UBE2D2, UBE2E2, UBE2E3, UBE2G2, UBE2K and UBE2Q2 and produces polyubiquitin chains (PubMed:26489670). Show the strongest activity when paired with UBE2N:UBE2V1 or UBE2N:UBE2V2 E2 complexes and generate both short and long polyubiquitin chains (PubMed:26489670). Involved in the ubiquitination of MAP3K5 (PubMed:24448648, PubMed:26489670) (By similarity). Able to interact with double-stranded RNA (dsRNA) (PubMed:26489670).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).