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Product datasheet for MC229394

Rc3h2 (NM_001290642) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rc3h2 (NM_001290642) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Rc3h2
Synonyms:	2900024N03Rik; 9430019J22Rik; D930043C02Rik; Mnab; Rnf164
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC229394 representing NM_001290642 Red=Cloning site Blue=ORF Orange=Stop codon TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGCCTGTGCAGGCAGCTCAATGGACAGAGTTTCTGTCCTGTCCAATCTGCTATAATGAATTTGATGAGA ATGTGCACAAACCCATCAGTTTAGGTTGTTCACACACAGTTTGCAAGACCTGCTTGAATAAACTTCACCG AAAAGCGTGTCCTTTTGACCAGACTGCCATAAACACAGACATTGATGTGCTCCCTGTCAACTTTGCACTT CTTCAGTTAGTTGGAGCCCAGGTACCAGATCATCAGTCAATAAAGTTAAGTAATCTAGGTGAGAATAAAC ACTATGAAGTGGCAAAAAAATGCGTAGAGGACTTGGCACTCTACTTAAAACCACTAAGTGGAGGTAAAGG TGTAGCTAGTTTGAACCAGAGTGCCCTGAGCCGTCCAATGCAAAGGAAACTAGTTACACTTGTAAACTGT CAACTGGTGGAAGAAGAAGGTCGTGTCAGAGCTATGCGAGCGGCCCGTTCACTAGGAGAAAGAACTGTGA CAGAACTGATACTGCAGCACCAGAACCCTCAGCAGCTGTCTGCCAACCTGTGGGCTGCTGTCAGGGCTCG AGGATGCCAGTTTCTAGGGCCAGCTATGCAAGAAGAAGCCTTGAAGTTGGTATTGCTGGCATTAGAAGAT GGTTCTGCTCTCTCTAGGAAAGTTCTAGTACTTTTTGTTGTGCAAAGACTAGAACCAAGATTTCCTCAGG CATCAAAAACAAGTATTGGCCATGTTGTGCAGCTATTGTACCGAGCTTCTTGTTTTAAGGTTACTAAAAG GGATGAAGACTCTTCCCTGATGCAGCTAAAGGAGGAATTTCGGAGTTACGAGGCACTACGCAGAGAACAT GATGCCCAGATTGTTCATATTGCCATGGAAGCAGGACTCCGTATTTCACCTGAGCAGTGGTCTTCACTGC TGTATGGGGACTTGGCTCATAAATCACACATGCAGTCTATCATTGATAAGCTACAGTCTCCAGAATCATT TGCAAAGAGTGTCCAGGAATTGACAATTGTTTTGCAGCGAACTGGTGACCCTGCTAATTTAAATAGGCTG AGACCTCATTTAGAGCTTCTTGCAAACATAGACCCTAATCCAGATGCTGTTTCACCAACTTGGGAGCAAC TGGAAAATGCAATGGTAGCTGTTAAAACAGTTGTTCATGGTCTTGTGGACTTCATACAAAATTATAGTAG AAAAGGCCATGAGACACCTCAGCCACAGCCAAACAGCAAGTATAAAACTAGTATGTGCCGAGATTTACGA CAACAAGGGGGTTGTCCACGAGGAACAAATTGTACATTTGCCCATTCTCAGGAAGAGCTTGAAAAGTACC GATTAAGGAACAAAAAGATGAGCGCGACTGTAAGAACATTTCCTCTTCTGAATAAAGTTGGTGTAAACAG CACTGTCACAACCACAGCCGGAAATGTCATTTCTGTCATAGGAAGTACTGAAACAACTGGGAAAATTGTT GCAAGTACAAATGGAATTTCAAATACAGAAAGCAGTGTTTCTCAGCTAATCCCACGAGGCACTGACAGTG

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CAGTAAGGACTTTGGAGACTGTGAAGAAAGTCGGGAAGGTTGGCACTAATGCTCAGAATGCTGGGCCCTC
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AACCAATTCTGCCGGTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001290642

Insert Size: 3378 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: Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

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.

RefSeq: NM_001290642.1, NP_001277571.1

RefSeq Size: 8962 bp

RefSeq ORF: 3378 bp

Locus ID: 319817

Cytogenetics: 2 B

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 (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). 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. Show 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).[UniProtKB/Swiss-Prot Function]
Transcript Variant: This variant (2) uses an alternate splice site that results in a frameshift in the 3' coding region, compared to variant 1. The encoded isoform (b) has a distinct C-terminus and is shorter than isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.