

RC3H1 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP14162b**Specification**

RC3H1 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q5TC82](#)**RC3H1 Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 149041**Other Names**

Roquin-1, Roquin, RING finger and C3H zinc finger protein 1, RING finger and CCCH-type zinc finger domain-containing protein 1, RING finger protein 198, RC3H1, KIAA2025, RNF198

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP14162b was selected from the C-term region of RC3H1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RC3H1 Antibody (C-term) Blocking peptide - Protein Information**Name** RC3H1 ([HGNC:29434](#))**Synonyms** KIAA2025, RNF198**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 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).

Cellular Location

Cytoplasm, P-body. Cytoplasmic granule {ECO:0000250|UniProtKB:Q4VGL6}. Note=During stress, such as that induced by arsenite treatment, localizes to cytosolic stress granules (By similarity). Localization to stress granules, but not to P-bodies, depends upon the RING-type zinc finger (By similarity). ICOS repression may correlate with the localization to P- bodies, not to stress granules (By similarity) {ECO:0000250|UniProtKB:Q4VGL6}

Tissue Location

Widely expressed. Expressed at higher level in cerebellum, spleen, ovary and liver. {ECO:0000269|Ref.3}

RC3H1 Antibody (C-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

RC3H1 Antibody (C-term) Blocking peptide - Images

RC3H1 Antibody (C-term) Blocking peptide - Background

RC3H1, or roquin, encodes a highly conserved member of theRING type ubiquitin ligase protein family (Vinuesa et al., 2005[PubMed 15917799]). The roquin protein is distinguished by thepresence of a CCCH zinc finger found in RNA-binding proteins, andlocalization to cytosolic RNA granules implicated in regulatingmRNA translation and stability.

RC3H1 Antibody (C-term) Blocking peptide - References

Vinuesa, C.G., et al. Nature 435(7041):452-458(2005)