

RC3H1 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14162b

Specification

RC3H1 Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	Q5TC82
Other Accession	Q6NUC6 , Q4VGL6 , NP_742068.1
Reactivity	Human
Predicted	Mouse, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	125736
Antigen Region	1015-1043

RC3H1 Antibody (C-term) - 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

This RC3H1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1015-1043 amino acids from the C-terminal region of human RC3H1.

Dilution

WB~~1:1000
IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

RC3H1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RC3H1 Antibody (C-term) - 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}

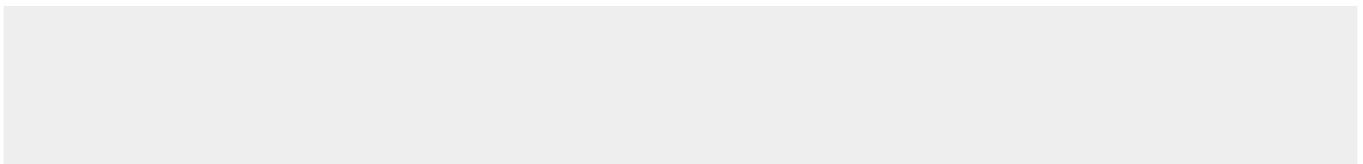
Tissue Location

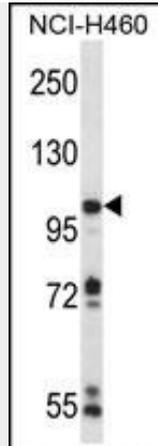
Widely expressed. Expressed at higher level in cerebellum, spleen, ovary and liver. {ECO:0000269|Ref.3}

RC3H1 Antibody (C-term) - Protocols

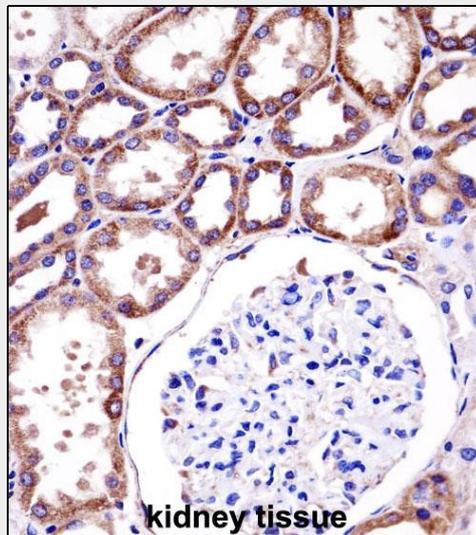
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

RC3H1 Antibody (C-term) - Images



RC3H1 Antibody (C-term) (Cat. #AP14162b) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the RC3H1 antibody detected the RC3H1 protein (arrow).



RC3H1 Antibody (C-term) (AP14162b) immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of RC3H1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

RC3H1 Antibody (C-term) - Background

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

RC3H1 Antibody (C-term) - References

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