

RTCD1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP6952a**Specification**

RTCD1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [O00442](#)**RTCD1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 8634**Other Names**

RNA 3'-terminal phosphate cyclase, RNA cyclase, RNA-3'-phosphate cyclase, RNA terminal phosphate cyclase domain-containing protein 1, RTC domain-containing protein 1, RTCA, RPC, RPC1, RTC1, RTCD1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6952a](/products/AP6952a) was selected from the N-term region of human RTCD1. 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.

RTCD1 Antibody (N-term) Blocking Peptide - Protein Information**Name** RTCA**Synonyms** RPC, RPC1, RTC1, RTCD1**Function**

Catalyzes the conversion of 3'-phosphate to a 2',3'-cyclic phosphodiester at the end of RNA (PubMed:[9184239](http://www.uniprot.org/citations/9184239)). The mechanism of action of the enzyme occurs in 3 steps: (A) adenylation of the enzyme by ATP; (B) transfer of adenylate to an RNA-N3'P to produce RNA- N3'PP5'A; (C) and attack of the adjacent 2'-hydroxyl on the 3'- phosphorus in the diester linkage to produce the cyclic end product (PubMed:[9184239](http://www.uniprot.org/citations/9184239)). Likely functions in some aspects of cellular RNA processing (PubMed:[9184239](http://www.uniprot.org/citations/9184239), PubMed:[9184239](http://www.uniprot.org/citations/9184239)

[25961792](http://www.uniprot.org/citations/25961792)). Function plays an important role in regulating axon regeneration by inhibiting central nervous system (CNS) axon regeneration following optic nerve injury (PubMed:<[25961792](http://www.uniprot.org/citations/25961792)>).

Cellular Location

Nucleus, nucleoplasm

Tissue Location

Ubiquitous.

RTCD1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

RTCD1 Antibody (N-term) Blocking Peptide - Images**RTCD1 Antibody (N-term) Blocking Peptide - Background**

RNA 3-prime-terminal phosphate cyclase catalyzes the ATP-dependent conversion of a 3-prime phosphate to a 2-prime,3-prime-cyclic phosphodiester at the end of RNA.

RTCD1 Antibody (N-term) Blocking Peptide - References

Genschik,P., et.al., EMBO J. 16 (10), 2955-2967 (1997)