

RTCD1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57291

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	<u>000442</u>
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39337

Additional Information

Gene ID	8634
Other Names	RNA 3'-terminal phosphate cyclase, RNA cyclase, RNA-3'-phosphate cyclase, 6.5.1.4, RNA terminal phosphate cyclase domain-containing protein 1, RTC domain-containing protein 1, RTCA, RPC, RPC1, RTC1, RTCD1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000- 10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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: <u>9184239</u>). 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: <u>9184239</u>). Likely functions in some aspects of cellular RNA processing (PubMed: <u>25961792</u> , PubMed: <u>9184239</u>). Function plays an important role in regulating axon regeneration by inhibiting central nervous system (CNS) axon regeneration following optic nerve injury (PubMed: <u>25961792</u>).
Cellular Location	Nucleus, nucleoplasm

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