

RNT2 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10764a**Specification**

RNT2 Antibody (N-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	O00584
Other Accession	NP_003721.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	25-55

RNT2 Antibody (N-term) - Additional Information**Gene ID** 8635**Other Names**

Ribonuclease T2, 3127-, Ribonuclease 6, RNASET2, RNASE6PL

Target/Specificity

This RNT2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 25-55 amino acids from the N-terminal region of human RNT2.

Dilution

WB~~1:500-1:1000

IHC-P~~1:50~100

E~~Use at an assay dependent concentration.

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

RNT2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RNT2 Antibody (N-term) - Protein Information**Name** RNASET2**Synonyms** RNASE6PL

Function Ribonuclease that plays an essential role in innate immune response by recognizing and degrading RNAs from microbial pathogens that are subsequently sensed by TLR8 (PubMed:[31778653](#)). Cleaves preferentially single-stranded RNA molecules between purine and uridine residues, which critically contributes to the supply of catabolic uridine and the generation of purine-2',3'-cyclophosphate-terminated oligoribonucleotides (PubMed:[31778653](#), PubMed:[38697119](#)). In turn, RNase T2 degradation products promote the RNA-dependent activation of TLR8 (PubMed:[31778653](#)). In plasmacytoid dendritic cells, it cooperates with PLD3 or PLD4 5'→3' exonucleases to process RNA fragments and release 2',3'-cyclic guanosine monophosphate (2',3'-cGMP), a potent stimulatory ligand for TLR7 (PubMed:[38697119](#)). Also plays a key role in degradation of mitochondrial RNA and processing of non-coding RNA imported from the cytosol into mitochondria (PubMed:[28730546](#), PubMed:[30184494](#)). Participates as well in degradation of mitochondrion-associated cytosolic rRNAs (PubMed:[30385512](#)).

Cellular Location

Secreted. Lysosome lumen. Endoplasmic reticulum lumen. Mitochondrion intermembrane space. Note=Full-length RNASET2 is found in the endoplasmic reticulum while smaller RNASET2 proteolytic products are found in the lysosome fraction.

Tissue Location

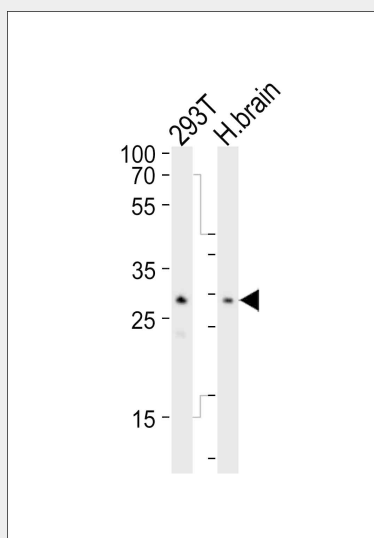
Ubiquitous. Higher expression levels observed in the temporal lobe and fetal brain.

RNT2 Antibody (N-term) - Protocols

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

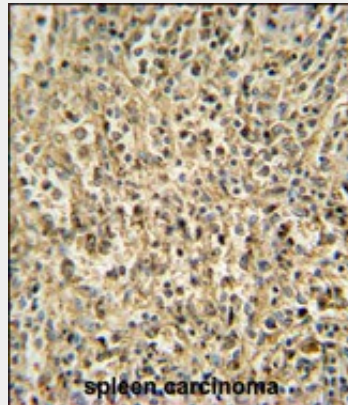
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

RNT2 Antibody (N-term) - Images



Western blot analysis of lysates from 293T cell line, human brain tissue lysate (from left to right),

using RNT2 Antibody (N-term)(Cat. #AP10764a). AP10764a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



RNT2 antibody (N-term) (Cat. #AP10764a) immunohistochemistry analysis in formalin fixed and paraffin embedded human spleen carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the RNT2 antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

RNT2 Antibody (N-term) - Background

This ribonuclease gene is a novel member of the Rh/T2/S-glycoprotein class of extracellular ribonucleases. It is a single copy gene that maps to 6q27, a region associated with human malignancies and chromosomal rearrangement.

RNT2 Antibody (N-term) - References

Fransen, K., et al. Hum. Mol. Genet. 19(17):3482-3488(2010)
Quan, C., et al. Nat. Genet. 42(7):614-618(2010)
Liu, J., et al. J. Cell. Mol. Med. 14(5):1146-1155(2010)
Henneke, M., et al. Nat. Genet. 41(7):773-775(2009)
Monti, L., et al. Oncol. Res. 17(2):69-74(2008)

RNT2 Antibody (N-term) - Citations

- [Regulation of mitochondrion-associated cytosolic ribosomes by mammalian mitochondrial ribonuclease T2 \(RNASET2\).](#)