

RT4I1 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10774b

Specification

RT4I1 Antibody (C-term) - Product Information

Application	FC, IHC-P, WB,E
Primary Accession	Q8WWV3
Other Accession	NP_116119.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	43590
Antigen Region	335-363

RT4I1 Antibody (C-term) - Additional Information

Gene ID 84816

Other Names

Reticulon-4-interacting protein 1, mitochondrial, NOGO-interacting mitochondrial protein, RTN4IP1, NIMP

Target/Specificity

This RT4I1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 335-363 amino acids from the C-terminal region of human RT4I1.

Dilution

FC~~1:10~50

IHC-P~~1:50~100

WB~~1:1000

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

RT4I1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RT4I1 Antibody (C-term) - Protein Information

Name RTN4IP1 {ECO:0000303|PubMed:37884807, ECO:0000312|HGNC:HGNC:18647}

Function NAD(P)H oxidoreductase involved in the ubiquinone biosynthetic pathway (PubMed:[37884807](#)). Required for the O- methyltransferase activity of COQ3 (PubMed:[37884807](#)). Able to catalyze the oxidoreduction of 3-demethylubiquinone into 3-demethylubiquinol in vitro (PubMed:[37884807](#)). However, it is unclear if 3-demethylubiquinone constitutes a substrate in vivo (PubMed:[37884807](#)). May also play a role in the regulation of retinal ganglion cell (RGC) neurite outgrowth, and hence in the development of the inner retina and optic nerve (By similarity). Appears to be a potent inhibitor of regeneration following spinal cord injury (By similarity).

Cellular Location

Mitochondrion matrix. Mitochondrion outer membrane. Note=Mainly localizes to the mitochondrial matrix (PubMed:37884807). Also colocalizes with the endoplasmic reticulum HSPA5 at spots corresponding to contacts with mitochondria (PubMed:26593267)

Tissue Location

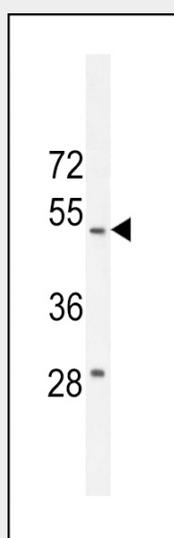
Widely expressed in mitochondria-enriched tissues (PubMed:12067236). Found in heart, muscle, kidney, liver, brain and placenta (PubMed:12067236).

RT4I1 Antibody (C-term) - Protocols

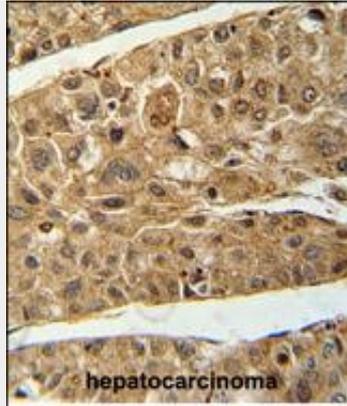
Provided below are standard protocols that you may find useful for product applications.

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

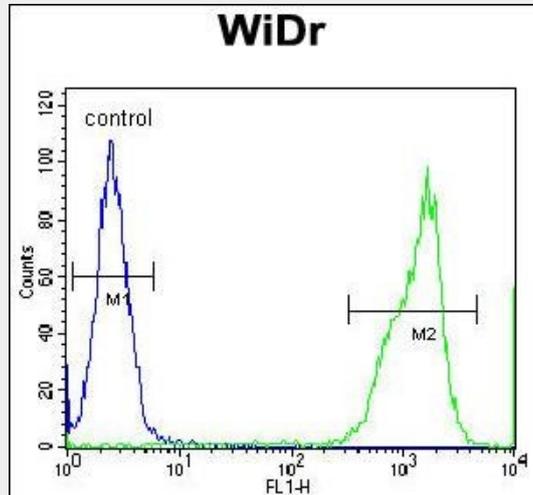
RT4I1 Antibody (C-term) - Images



RT4I1 Antibody (C-term) (Cat. #AP10774b) western blot analysis in WiDr cell line lysates (35ug/lane). This demonstrates the RT4I1 antibody detected the RT4I1 protein (arrow).



RT4I1 Antibody (C-term) (Cat. #AP10774b) immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the RT4I1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



RT4I1 Antibody (C-term) (Cat. #AP10774b) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

RT4I1 Antibody (C-term) - Background

This gene encodes a novel mitochondrial protein that interacts with reticulon 4, which is a potent inhibitor of regeneration following spinal cord injury. The interaction of reticulon 4 with mitochondrial proteins may provide insight into the mechanisms for reticulon-induced inhibition of neurite growth.

RT4I1 Antibody (C-term) - References

- Rose, J. Phd, et al. Mol. Med. (2010) In press :
- Mungall, A.J., et al. Nature 425(6960):805-811(2003)
- Domeniconi, M., et al. Neuron 35(2):283-290(2002)
- Hu, W.H., et al. J. Neurochem. 81(1):36-45(2002)