

RTN4R Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51939**Specification**

RTN4R Antibody - Product Information

Application	WB, E
Primary Accession	Q9BZR6
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51 KDa

RTN4R Antibody - Additional Information**Gene ID** 65078**Other Names**

Reticulon-4 receptor, Nogo receptor, NgR, Nogo-66 receptor, RTN4R, NOGOR

Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RTN4R. The exact sequence is proprietary.

Dilution

WB~~1:1000

E~~N/A

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

RTN4R Antibody - Protein Information**Name** RTN4R**Synonyms** NOGOR**Function**

Receptor for RTN4, OMG and MAG (PubMed: [12037567](http://www.uniprot.org/citations/12037567) target="_blank">12037567, PubMed: [12068310](http://www.uniprot.org/citations/12068310) target="_blank">12068310, PubMed: [12089450](http://www.uniprot.org/citations/12089450) target="_blank">12089450, PubMed: [12426574](http://www.uniprot.org/citations/12426574) target="_blank">12426574, PubMed: [12839991](http://www.uniprot.org/citations/12839991) target="_blank">12839991, PubMed: [16712417](http://www.uniprot.org/citations/16712417) target="_blank">16712417, PubMed: [18411262](http://www.uniprot.org/citations/18411262) target="_blank">18411262)

target="_blank">18411262, PubMed:19052207). Functions as a receptor for the sialylated gangliosides GT1b and GM1 (PubMed:18411262). Besides, functions as a receptor for chondroitin sulfate proteoglycans (By similarity). Can also bind heparin (By similarity). Intracellular signaling cascades are triggered via the coreceptor NGFR (PubMed:12426574). Signaling mediates activation of Rho and downstream reorganization of the actin cytoskeleton (PubMed:16712417, PubMed:22325200). Mediates axonal growth inhibition (PubMed:12839991, PubMed:19052207, PubMed:28892071). Plays a role in regulating axon regeneration and neuronal plasticity in the adult central nervous system. Plays a role in postnatal brain development. Required for normal axon migration across the brain midline and normal formation of the corpus callosum. Protects motoneurons against apoptosis; protection against apoptosis is probably mediated via interaction with MAG. Acts in conjunction with RTN4 and LINGO1 in regulating neuronal precursor cell motility during cortical development. Like other family members, plays a role in restricting the number dendritic spines and the number of synapses that are formed during brain development (PubMed:22325200).

Cellular Location

Cell membrane; Lipid- anchor, GPI-anchor. Membrane raft. Cell projection, dendrite {ECO:0000250|UniProtKB:Q99PI8}. Cell projection, axon {ECO:0000250|UniProtKB:Q99PI8}. Perikaryon {ECO:0000250|UniProtKB:Q99M75}. Note=Detected along dendrites and axons, close to synapses, but clearly excluded from synapses {ECO:0000250|UniProtKB:Q99PI8}

Tissue Location

Widespread in the brain but highest levels in the gray matter. Low levels in heart and kidney; not expressed in oligodendrocytes (white matter).

RTN4R Antibody - 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](#)

RTN4R Antibody - Images

RTN4R Antibody - Background

Receptor for RTN4, OMG and MAG. Mediates axonal growth inhibition and may play a role in regulating axonal regeneration and plasticity in the adult central nervous system. Acts in conjunction with RTN4 and LINGO1 in regulating neuronal precursor cell motility during cortical development (By similarity).

RTN4R Antibody - References

Fournier A.E.,et al.Nature 409:341-346(2001).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).
Collins J.E.,et al.Genome Biol. 5:R84.1-R84.11(2004).
Dunham I.,et al.Nature 402:489-495(1999).