

**RTN4R Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP10462c****Specification**

---

**RTN4R Antibody (Center) Blocking Peptide - Product Information**

Primary Accession [O9BZR6](#)  
Other Accession [NP\\_075380.1](#)

**RTN4R Antibody (Center) Blocking Peptide - Additional Information**

**Gene ID** 65078

**Other Names**

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

**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.

**RTN4R Antibody (Center) Blocking Peptide - Protein Information**

**Name** RTN4R

**Synonyms** NOGOR

**Function**

Receptor for RTN4, OMG and MAG (PubMed: [12037567](http://www.uniprot.org/citations/12037567), PubMed: [12068310](http://www.uniprot.org/citations/12068310), PubMed: [12089450](http://www.uniprot.org/citations/12089450), PubMed: [12426574](http://www.uniprot.org/citations/12426574), PubMed: [12839991](http://www.uniprot.org/citations/12839991), PubMed: [16712417](http://www.uniprot.org/citations/16712417), PubMed: [18411262](http://www.uniprot.org/citations/18411262), PubMed: [19052207](http://www.uniprot.org/citations/19052207)). Functions as a receptor for the sialylated gangliosides GT1b and GM1 (PubMed: [18411262](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/12426574)). Signaling mediates activation of Rho and downstream reorganization of the actin cytoskeleton (PubMed: [12426574](http://www.uniprot.org/citations/12426574)).

href="http://www.uniprot.org/citations/16712417" target="\_blank">16712417</a>, PubMed:<a href="http://www.uniprot.org/citations/22325200" target="\_blank">22325200</a>). Mediates axonal growth inhibition (PubMed:<a href="http://www.uniprot.org/citations/12839991" target="\_blank">12839991</a>, PubMed:<a href="http://www.uniprot.org/citations/19052207" target="\_blank">19052207</a>, PubMed:<a href="http://www.uniprot.org/citations/28892071" target="\_blank">28892071</a>). 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:<a href="http://www.uniprot.org/citations/22325200" target="\_blank">22325200</a>).

#### **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 (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **RTN4R Antibody (Center) Blocking Peptide - Images**

### **RTN4R Antibody (Center) Blocking Peptide - Background**

RTN4R is the receptor for reticulon 4, oligodendrocyte myelin glycoprotein and myelin-associated glycoprotein. This receptor mediates axonal growth inhibition and may play a role in regulating axonal regeneration and plasticity in the adult central nervous system.

### **RTN4R Antibody (Center) Blocking Peptide - References**

Saus, E., et al. J Psychiatr Res 44(14):971-978(2010) Raiker, S.J., et al. J. Neurosci. 30(37):12432-12445(2010) Lee, E.J., et al. Oncol. Res. 18(9):401-408(2010) Zhang, L., et al. J. Neurosci. 29(19):6348-6352(2009) Voineskos, A.N. J. Neurosci. 29(16):5045-5047(2009)