10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RTN4R Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP12238c

Specification

RTN4R Antibody (Center) Blocking peptide - Product Information

Primary Accession Q9BZR6

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, PubMed:12068310, PubMed:12426574, PubMed:12089450, PubMed:16712417, PubMed:18411262, PubMed:12839991, 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:<a

href="http://www.uniprot.org/citations/22325200" target="_blank">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 (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

This gene encodes the receptor for reticulon 4,oligodendrocyte myelin glycoprotein and myelin-associatedglycoprotein. This receptor mediates axonal growth inhibition andmay play a role in regulating axonal regeneration and plasticity inthe 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)