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

Nogo R Recombinant Rabbit mAb

Catalog # AP100322

Product Information

Application	WB, IP
Primary Accession	Q9BZR6
Other Accession	Q9BZR6
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	50708
Physical State	Liquid
Immunogen	A synthesized peptide derived from human Reticulon 4 receptor
Epitope Specificity	350-400/473
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	10mM phosphate buffered saline(pH 7.4) with 150mM sodium chloride, 0.05% BSA, 0.02% Proclin300 and 50% glycerol.
SIMILARITY	Belongs to the Nogo receptor family. Contains 8 LRR (leucine-rich) repeats. Contains 1 LRRCT domain. Contains 1 LRRNT domain.
SUBUNIT	Homomultimer. Interacts with LINGO1. Interacts with KIAA0319L.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Receptor for RTN4, OMG and MAG,Functions as a receptor for the sialylated gangliosides GT1b and GM1.Besides, functions as a receptor for chondroitin sulfate proteoglycans.

Additional Information

Gene ID	65078
Other Names	NGR; NOGOR; NgR1; RTN4R_HUMAN; RTN4R; Nogo receptor (NgR); Nogo-66 receptor; RTN4R_MOUSE; Nogo66 receptor-1 (NgR1); RTN4R_RAT; reticulon 4 receptor; NOGO receptor
Dilution	WB=1:500-2000,IP=1:20-50
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	RTN4R

Synonyms	NOGOR
Function	Receptor for RTN4, OMG and MAG (PubMed: 12037567, PubMed:12068310, PubMed:12089450, PubMed:12426574, PubMed:12839991, PubMed:16712417, PubMed: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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.