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Nogo Receptor Antibody

Rabbit mAb
Catalog # AP92269

Product Information

Application	WB, IP
Primary Accession	Q9BZR6
Reactivity	Human, Mouse
Clonality	Monoclonal
Other Names	NgR; Nogo 66 receptor; Nogo receptor; Nogor; Reticulon 4 receptor; Rtn4r;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	50708

Additional Information

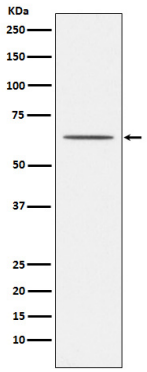
Dilution	WB 1:1000~1:5000 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Nogo Receptor
Description	Nogo Receptor mediates axonal growth inhibition and may play a role in regulating axonal regeneration and plasticity in the adult central nervous system. It is also a receptor for Nogo A (RTN4), OMG and MAG.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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).

Images



Western blot analysis of Nogo Receptor expression in HepG2 cell lysate.