

Nogo R Rabbit pAb

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Catalog # AP94627

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q99PI8
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50987
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse Nogo R
Epitope Specificity	151-350/473
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane; Lipid-anchor, GPI-anchor.
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	Axons are essential for neuronal communication but they do not regenerate after injury to the adult mammalian brain or spinal cord. Failed regeneration is due in part to the production of a potent axonal growth inhibitor, Nogo, by myelinating cells. The finding of a high affinity axonal receptor for the extracellular domain of Nogo provides the first insight into the basis of Nogo action. Disrupting the interaction of Nogo with the Nogo-66 receptor may facilitate axonal regeneration in vivo. The protein is dubbed the Nogo receptor because it binds with several other proteins that block neural growth. It is found to be ubiquitous in the brain and spinal cord.

Additional Information

Gene ID	65079
Other Names	Reticulon-4 receptor, Nogo receptor, NgR, Nogo-66 receptor, Nogo66 receptor-1, NgR1, Rtn4r, Ngr1, Nogor
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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

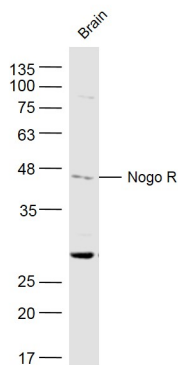
Name	Rtn4r
Synonyms	Ngr1, Nogor
Function	Receptor for RTN4, OMG and MAG (PubMed: 11201742 , PubMed: 12089450 , PubMed: 15504325 , PubMed: 18411262 , PubMed: 22923615). Functions as a receptor for the sialylated gangliosides GT1b and GM1 (PubMed: 18411262). Besides, functions as a receptor for chondroitin sulfate proteoglycans (PubMed: 22406547). Can also bind heparin (PubMed: 22406547). Intracellular signaling cascades are triggered via the coreceptor NGFR (By similarity). Signaling mediates activation of Rho and downstream reorganization of the actin cytoskeleton (PubMed: 22325200). Mediates axonal growth inhibition (By similarity). Mediates axonal growth inhibition and plays a role in regulating axon regeneration and neuronal plasticity in the adult central nervous system (PubMed: 11201742 , PubMed: 12089450 , PubMed: 15504325 , PubMed: 22923615). Plays a role in postnatal brain development (PubMed: 27339102). Required for normal axon migration across the brain midline and normal formation of the corpus callosum (PubMed: 27339102). Protects motoneurons against apoptosis; protection against apoptosis is probably mediated via interaction with MAG (PubMed: 26335717). Acts in conjunction with RTN4 and LINGO1 in regulating neuronal precursor cell motility during cortical development (PubMed: 20093372). 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 {ECO:0000250 UniProtKB:Q9BZR6}. Cell projection, dendrite. Cell projection, axon. Perikaryon {ECO:0000250 UniProtKB:Q99M75}. Note=Detected along dendrites and axons, close to synapses, but clearly excluded from synapses
Tissue Location	Detected in embryonic hippocampus neurons (PubMed:22325200). Detected in brain (at protein level) (PubMed:15504325, PubMed:22406547). Detected in neurons in the neocortex, in hippocampus, dorsal thalamus, cerebellum granule cell layer and the mitral cell layer in the olfactory bulb (PubMed:15647357). Detected in brain, dorsal root ganglion and heart

Background

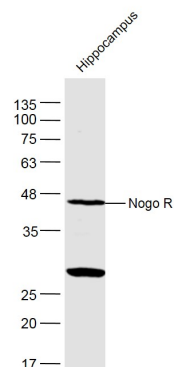
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Images

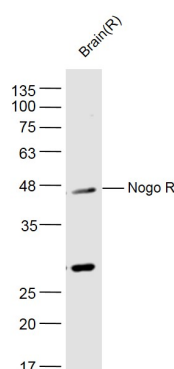
Sample: Brain (Mouse) Lysate at 40 ug Primary: Anti-Nogo R (AP94627) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 48 kD Observed band size: 48 kD



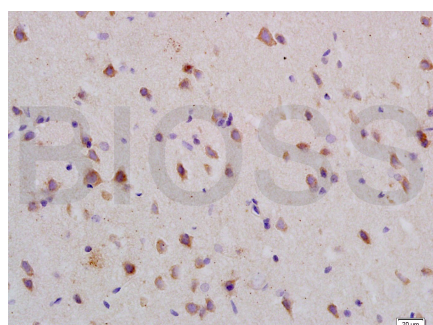
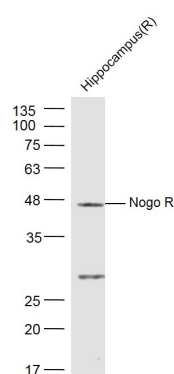
Sample: Hippocampus (Mouse) Lysate at 40 ug Primary: Anti- Nogo R (AP94627) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 48 kD Observed band size: 48 kD



Sample: Brain (Rat) Lysate at 40 ug Primary: Anti- Nogo R (AP94627) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 48 kD Observed band size: 48 kD



Sample: Hippocampus (Rat) Lysate at 40 ug Primary: Anti- Nogo R (AP94627) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 48 kD Observed band size: 48 kD



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-Nogo-R Polyclonal Antibody, Unconjugated(AP94627) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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