

Goat Anti-Nogo 66 receptor Antibody

Peptide-affinity purified goat antibody Catalog # AF1737a

Specification

Goat Anti-Nogo 66 receptor Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB <u>O9BZR6</u> <u>NP_075380, 65078</u> Human Mouse, Rat, Pig, Dog Goat Polyclonal 100ug/200ul IgG 50708

Goat Anti-Nogo 66 receptor Antibody - Additional Information

Gene ID 65078

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

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-Nogo 66 receptor Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Nogo 66 receptor Antibody - Protein Information

Name RTN4R

Synonyms NOGOR

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Function
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Receptor for RTN4, OMG and MAG (PubMed:<a href="http://www.uniprot.org/citations/12037567" target="_blank">12037567</a>, PubMed:<a href="http://www.uniprot.org/citations/12068310" target="_blank">12068310</a>, PubMed:<a href="http://www.uniprot.org/citations/12426574" target="_blank">12426574</a>, PubMed:<a href="http://www.uniprot.org/citations/12089450"
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target=" blank">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: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

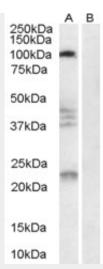
Widespread in the brain but highest levels in the gray matter. Low levels in heart and kidney; not expressed in oligodendrocytes (white matter).

Goat Anti-Nogo 66 receptor Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-Nogo 66 receptor Antibody - Images



AF1737a (0.3 μ g/ml) staining of Human Brain lysate (35 μ g protein in RIPA buffer) with (B) and without (A) blocking with the immunising peptide. Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-Nogo 66 receptor Antibody - Background

This gene encodes 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.

Goat Anti-Nogo 66 receptor Antibody - References

Distinct DNA methylation profiles between adenocarcinoma and squamous cell carcinoma of human uterine cervix. Lee EJ, et al. Oncol Res, 2010. PMID 20524398.

Comprehensive copy number variant (CNV) analysis of neuronal pathways genes in psychiatric disorders identifies rare variants within patients. Saus E, et al. J Psychiatr Res, 2010 Apr 14. PMID 20398908.

Identification of BLyS (B lymphocyte stimulator), a non-myelin-associated protein, as a functional ligand for Nogo-66 receptor. Zhang L, et al. J Neurosci, 2009 May 13. PMID 19439611.

Converging evidence for the Nogo-66 receptor gene in schizophrenia. Voineskos AN. J Neurosci, 2009 Apr 22. PMID 19386899.

Myelin regulates immune cell adhesion and motility. Pool M, et al. Exp Neurol, 2009 Jun. PMID 19328785.