

Anti-NOGO-A / RTN4R Antibody (Internal)

Rabbit Anti Human Polyclonal Antibody

Catalog # ALS17433

Product Information

Application	WB, IHC-P
Primary Accession	Q9BZR6
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50708
Concentration (mg/ml)	1 mg/ml

Additional Information

Gene ID	65078
Alias Symbol	RTN4R
Other Names	RTN4R, Nogo receptor, Nogo-66 receptor, Reticulon-4 receptor, NGR, NOGO-A, UNQ330/PRO526, NOGOR, Reticulon 4 receptor
Target/Specificity	Recognizes endogenous levels of RTN4R protein.
Reconstitution & Storage	PBS, pH 7.3, 0.01% sodium azide, 30% glycerol. Store at -20°C. Aliquot to avoid freeze/thaw cycles.
Precautions	Anti-NOGO-A / RTN4R Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

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'.