

Instruction Manual

Catalog Number	PK-AB718-4087
Synonyms	NogoA Antibody: Neurite outgrowth inhibitor A, reticulon 4, RTN4
Description	NogoA is a member of a family of integral membrane proteins termed reticulons that are thought to be involved in numerous disorders including neurodegenerative diseases. Reticulon proteins are known to regulate many cellular processes and interact with multiple proteins and receptors such as BACE. NogoA was initially identified as a myelin-associated neurite outgrowth inhibitor. It is highly expressed in oligodendrocytes in the white matter of the CNS; blocking its activity with antibodies or other factors results in improved axon regrowth and functional recovery in experimental CNS lesion models. NogoA has also been suggested to play a role in neurodegenerative diseases such as Amyotrophic lateral sclerosis, in which case NogoA is found at elevated levels in postmortem muscular samples, and multiple sclerosis (MS), in which case autoantibodies to NogoA have been found in serum and cerebrospinal fluid in MS patients. Despite its predicted molecular weight, NogoA typically migrates at 180kDa in an SDS-PAGE. At least five isoforms of Nogo are known to exist; this antibody is specific for NogoA.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	NogoA antibody was raised in rabbits against a 23 amino acid peptide from near the amino terminus of human NogoA.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	At least five isoforms of Nogo are known to exist; this antibody is specific for NogoA.
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IHC, IF I Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. NogoA antibody can be used for detection of NogoA by Western blot at 0.5 - 1 µg/mL. Despite its predicted molecular weight, NogoA typically migrates at 180 kDa in an SDS-PAGE. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.
Images	Available upon request.
References	Yan R, ShiQ, Hu X, et al. Reticulon proteins: emerging players in neurodegenerative diseases. Cell. Mol. Life Sci. 2006; 63:877-889. Chen MS, Huber AB, van der Haar ME, et al. Nogo-A is a myelin-associated neurite outgrowth inhibitor and an antigen for monoclonal antibody IN-1. Nature 2000; 403:434-9. Schweigreiter R and Bandtlow CE. Nogo in the injured spinal cord. J. Neurotrauma 2006; 3-4:384-96. Dupuis L, Gonzalez de Aguilar JL, di Scala F, et al. Nogo provides a molecular marker for diagnosis of amyloid lateral sclerosis. Neurobiol. Dis. 2002; 10:358-65.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4087P; NogoA Peptide Cat.No. PK-AB718-1403; Mouse Brain Tissue Lysate
FOR IN VITRO RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC PROCEDURES.	