

Rabbit anti-Human Nogo A/RTN4 Polyclonal Antibody | anti-RTN4 antibody

Anti-Nogo A/RTN4 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125625	Rabbit	Human	Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

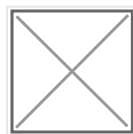
PRODUCT SYNONYMS

Nogo A/RTN4; Polyclonal Antibody; Anti-Nogo A/RTN4 Antibody; Reticulon-4; Foccen; Neurite outgrowth inhibitor; Nogo protein; Neuroendocrine-specific protein; NSP; Neuroendocrine-specific protein C homolog; RTN-x; Reticulon-5; RTN4; KIAA0886; NOGO; My043; SP1507; reticulon 4; anti-RTN4 antibody

PRODUCT SPECIFICATIONS

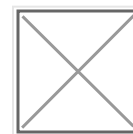
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Nogo A/RTN4 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-RTN4 antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence of human Nogo A/RTN4 (VSNNILHNQQELPTALTCLV).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of SiHa cells using anti-Nogo A/RTN4 antibody (AAA125625). Overlay histogram showing SiHa cells stained with AAA125625 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Nogo A/RTN4 Antibody (AAA125625, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight[®]488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



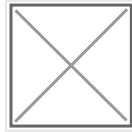
IF (Immunofluorescence)

Figure 4. IF analysis of Nogo A/RTN4 using anti-Nogo A/RTN4 antibody (AAA125625). Nogo A/RTN4 was detected in immunocytochemical section of U2OS cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 4µg/mL rabbit anti-Nogo A/RTN4 Antibody (AAA125625) overnight at 4 degree C. DyLight[®]594 Conjugated Goat Anti-Rabbit IgG (BA1142) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



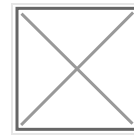
IF (Immunofluorescence)

Figure 3. IF analysis of Nogo A/RTN4 using anti-Nogo A/RTN4 antibody (AAA125625). Nogo A/RTN4 was detected in paraffin-embedded section of human prostatic cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 4µg/mL rabbit anti-Nogo A/RTN4 Antibody (AAA125625) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of Nogo A/RTN4 using anti-Nogo A/RTN4 antibody (AAA125625). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50µg of sample under reducing conditions. Lane 1: human U-87MG whole cell lysates. Lane 2: human SH-SY5Y whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Nogo A/RTN4 antigen affinity purified polyclonal antibody (Catalog # AAA125625) at 0.25 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Nogo A/RTN4 at approximately 180KD. The expected band size for Nogo A/RTN4 is at 180KD.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Nogo A/RTN4 using anti-Nogo A/RTN4 antibody (AAA125625). Nogo A/RTN4 was detected in paraffin-embedded section of human prostatic cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/mL rabbit anti-Nogo A/RTN4 Antibody (AAA125625) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-RTN4 antibody	Human neurite outgrowth inhibitor (Nogo) cDNAs encodes 3 splice variants: NogoA, NogoB and NogoC. The longest cDNA, designated NogoA, has an open reading frame of 1192 amino acids. It is a potent inhibitor of neurite growth and an IN-1 antigen produced by oligodendrocytes, and may allow the generation of new reagents to enhance CNS regeneration and plasticity. Nogo-A, a member of the Reticulon family, is expressed by oligodendrocytes and associates primarily with the endoplasmic reticulum. The acidic amino terminus of Nogo-A is detected at the cytosolic face of cellular membranes and may contribute to inhibition of axon regeneration at sites of oligodendrocyte injury. A multivalent form of the N terminus of Nogo-A affects the morphology of both neurons and other cell types.
References	1. Prinjha R, Moore SE, Vinson M, Blake S, Morrow R, Christie G, Michalovich D, Simmons DL, Walsh FS. Inhibitor of neurite outgrowth in humans. <i>Nature</i>. 2000 Jan 27; 403(6768):383-4. 2. Chen MS, Huber AB, van der Haar ME, Frank M, Schnell L, Spillmann AA, Christ F, Schwab ME. Nogo-A is a myelin-associated neurite outgrowth inhibitor and an antigen for monoclonal antibody IN-1. <i>Nature</i>. 2000 Jan 27; 403(6768):434-9. 3. GrandPre T, Nakamura F, Vartanian T, Strittmatter SM. Identification of the Nogo inhibitor of axon regeneration as a Reticulon protein. <i>Nature</i>. 2000 Jan 27; 403(6768):439-44. 4. Fournier AE, GrandPre T, Strittmatter SM. Identification of a receptor mediating Nogo-66 inhibition of axonal regeneration. <i>Nature</i>. 2001 Jan 18; 409(6818):341-6.

NCBI AND UNIPROT INFORMATION

NCBI GI #	17369290
NCBI GeneID	57142
UniProt Accession #	Q9NQC3 ; Q94962 ; Q7L7Q5 ; Q7L7Q6 ; Q7L7Q8 ; Q8IU44 ; Q96B16 ; Q9BXG5 ; Q9H212 ; Q9H3I3 ; Q9UQ42 ; Q9Y293
Molecular Weight	1192
NCBI Official Full Name	Reticulon-4

NCBI Official Synonym Full Names	reticulon 4
NCBI Official Symbol	RTN4
NCBI Official Synonym Symbols	ASY; NSP; NOGO; NOGOC; RTN-X; NOGO-A; NSP-CL; Nogo-B; Nogo-C; RTN4-A; RTN4-C; RTN4-B1; RTN4-B2; NI220/250; Nbla00271; Nbla10545
NCBI Protein Information	reticulon-4; foocen; Human NogoA; reticulon 5; My043 protein; neurite outgrowth inhibitor; neurite growth inhibitor 220; neuroendocrine-specific protein C homolog
UniProt Protein Name	Reticulon-4
UniProt Gene Name	RTN4
UniProt Synonym Gene Names	KIAA0886; NOGO; Nogo protein; NSP
UniProt Entry Name	RTN4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/nogo-a-rtn4-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/125625>