

Product Name: Nogo A Rabbit Polyclonal Antibody**Catalog #: APRab14784**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight	220kDa

Antigen Information

Gene Name	RTN4 RTN4; KIAA0886; NOGO; My043; SP1507; Reticulon-4; Foocen; Neurite outgrowth inhibitor;
Alternative Names	Nogo protein; Neuroendocrine-specific protein; NSP; Neuroendocrine-specific protein C homolog; RTN-x; Reticulon-5
Gene ID	57142.0
SwissProt ID	Q9NQC3
Immunogen	The antiserum was produced against synthesized peptide derived from human Nogo A. AA range:450-499

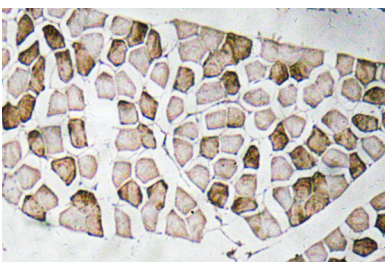
Background

This gene belongs to the family of reticulon encoding genes. Reticulons are associated with the endoplasmic reticulum, and are involved in neuroendocrine secretion or in membrane trafficking in neuroendocrine cells. The product of this gene is a potent neurite outgrowth inhibitor which may also help block the regeneration of the central nervous system in higher vertebrates. Alternatively spliced transcript variants derived both from differential splicing and differential promoter usage and encoding different isoforms have been identified. [provided by RefSeq, Jul 2008],domain:Three regions, residues 59-172, 544-725 and the loop 66 amino acids, between the two transmembrane domains, known as Nogo-66 loop, appear to be responsible for the inhibitory effect on neurite outgrowth and the spreading of neurons. This Nogo-66 loop, mediates also the binding of RTN4 to its receptor.,function:Potent neurite growth inhibitor in vitro and plays a role both in the restriction of axonal regeneration after injury and in structural plasticity in the CNS. Isoform 2 reduces the anti-apoptotic activity of Bcl-xl and Bcl-2. This is likely consecutive to their change in subcellular location, from the mitochondria to the endoplasmic reticulum, after binding and sequestration. Isoform 2 and isoform 3 inhibit BACE1 activity and amyloid precursor protein processing.,online information:Nerve regrowth: nipped by a no-go - Issue 69 of April 2006,online information:The Singapore human mutation and polymorphism database,sequence caution:Translation N-terminally extended.,similarity:Contains 1 reticulon domain.,subcellular location:Anchored to the membrane of the endoplasmic reticulum through 2 putative transmembrane domains.,subunit:Binds to RTN4R. Interacts with Bcl-xl and Bcl-2. Isoform 2 binds to NGBR and RTN3. Isoform 2 and isoform 3 interact with BACE1 and BACE2. Interacts with RTN4IP1.,tissue specificity:Isoform 1 is specifically expressed in brain and testis and weakly in heart and skeletal muscle. Isoform 2 is widely expressed except for the liver. Isoform 3 is expressed in brain, skeletal muscle and adipocytes. Isoform 4 is testis-specific.,

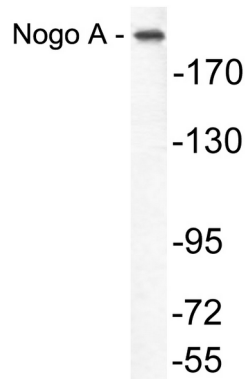
Research Area

Regulation of Microtubule Dynamics; Regulation of Actin Dynamics; SAPK_JNK; Stem cell pathway; Adherens_Junction

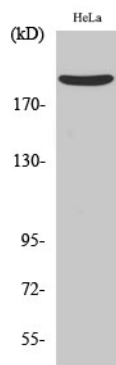
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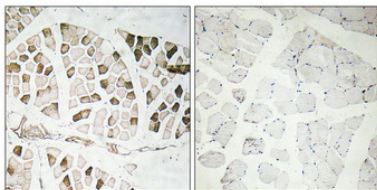
Immunohistochemistry analysis of Nogo A antibody in paraffin-embedded human skeletal muscle tissue.



Western blot analysis of lysate from COLO205 cells, using Nogo A antibody.



Western Blot analysis of various cells using Nogo A Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human skeletal muscle. Antibody was diluted at 1:100 (4°, overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.