

Nogo A Polyclonal Antibody

Catalog No: YT3162

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;ELISA

Target: Nogo A

Fields: >>Alzheimer disease

Gene Name: RTN4

Protein Name: Reticulon-4

Human Gene ld: 57142

Human Swiss Prot

Prot Q9NQC3

No:

Mouse Gene Id: 68585

Mouse Swiss Prot

Q99P72

No:

Rat Gene ld: 83765

Rat Swiss Prot No: Q9JK11

Immunogen: The antiserum was produced against synthesized peptide derived from human

Nogo A. AA range:450-499

Specificity: Nogo A Polyclonal Antibody detects endogenous levels of Nogo A protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.

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Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 220kD

Cell Pathway: Regulation of Microtubule Dynamics; Regulation of Actin Dynamics; SAPK_JNK;

Stem cell pathway; Adherens_Junction

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],

Function: 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 hu

Subcellular Location:

[Isoform A]: Endoplasmic reticulum membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein; Cytoplasmic side. Anchored to

the membrane of the endoplasmic reticulum (ER) through 2 putative

transmembrane domains. Localizes throughout the ER tubular network

(PubMed:27619977). Co-localizes with TMEM33 at the ER sheets. .; [Isoform B]:

Endoplasmic reticulum membrane ; Multi-pass membrane protein . Cell membrane ; Multi-pass membrane protein ; Extracellular side . Cell junction .

Mainly located on endoplasmic reticulum tubules and sheet edges

(PubMed:27786289). Upon ICAM1 engagement, redistributed toward endothelial

junctions where interacts with CDH5 (PubMed:21183689). .; [Isoform C]:

Endoplasmic reticulum membrane; Multi-pass membrane protein.

Expression: Isoform A: is specifically expressed in brain and testis and weakly in heart and



skeletal muscle. Isoform B: widely expressed except for the liver. Highly expressed in endothelial cells and vascular smooth muscle cells, including blood vessels and mesenteric arteries (PubMed:15034570, PubMed:21183689). Isoform C: is expressed in brain, skeletal muscle and adipocytes. Isoform D is testis-specific.

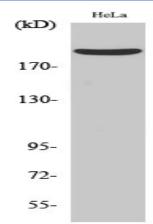
Sort : 10918

No4:

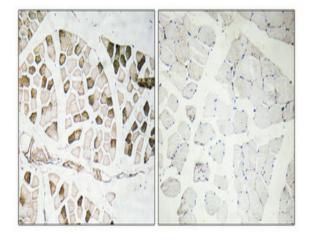
Host: Rabbit

Modifications: Unmodified

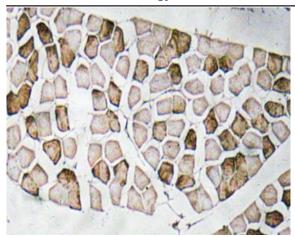
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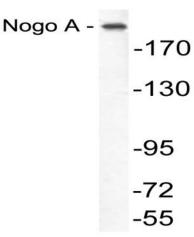
Western Blot analysis of various cells using Nogo A Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human skeletal muscle. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Immunohistochemistry analysis of Nogo A antibody in paraffinembedded human skeletal muscle tissue.



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