

Anti-Nogo Antibody

Rabbit polyclonal antibody to Nogo Catalog # AP60392

Product Information

Application	WB, IHC
Primary Accession	<u>Q9NQC3</u>
Other Accession	<u>Q99P72</u>
Reactivity	Human, Mouse, Rat, Rabbit, Monkey, Bovine, Dog, SARS
Host	Rabbit
Clonality	Polyclonal
Calculated MW	129931

Additional Information

Gene ID	57142
Other Names	KIAA0886; NOGO; Reticulon-4; Foocen; Neurite outgrowth inhibitor; Nogo protein; Neuroendocrine-specific protein; NSP; Neuroendocrine-specific protein C homolog; RTN-x; Reticulon-5
Target/Specificity	Recognizes endogenous levels of Nogo protein.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	RTN4 (<u>HGNC:14085</u>)
Function	Required to induce the formation and stabilization of endoplasmic reticulum (ER) tubules (PubMed: <u>24262037</u> , PubMed: <u>25612671</u> , PubMed: <u>27619977</u>). They regulate membrane morphogenesis in the ER by promoting tubular ER production (PubMed: <u>24262037</u> , PubMed: <u>25612671</u> , PubMed: <u>27619977</u> , PubMed: <u>27786289</u>). They influence nuclear envelope expansion, nuclear pore complex formation and proper localization of inner nuclear membrane proteins (PubMed: <u>26906412</u>). However each isoform have specific functions mainly depending on their tissue expression specificities (Probable).
Cellular Location	[Isoform A]: Endoplasmic reticulum membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein; Cytoplasmic side Synapse {ECO:0000250 UniProtKB:Q99P72}. Note=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 C]: Endoplasmic reticulum membrane; Multi-pass membrane protein
Tissue Location	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.

Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Nogo. The exact sequence is proprietary.

Images



Western blot analysis of Nogo expression in mouse brain (A), rat brain (B), K562 (C), U87MG (D) whole cell lysates.



Immunohistochemical analysis of Nogo staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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