

Nogo A Polyclonal Antibody

Catalog # AP71345

Product Information

| Application | WB, IHC-P |
|-------------------|-------------------|
| Primary Accession | <u>Q9NQC3</u> |
| Reactivity | Human, Mouse, Rat |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 129931 |

Additional Information

| Gene ID | 57142 |
|--------------------|---|
| Other Names | RTN4; KIAA0886; NOGO; My043; SP1507; Reticulon-4; Foocen; Neurite outgrowth inhibitor; Nogo protein; Neuroendocrine-specific protein; NSP; Neuroendocrine-specific protein C homolog; RTN-x; Reticulon-5 |
| Dilution | WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications. |
| Format | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| Storage Conditions | -20°C |

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

Required to induce the formation and stabilization of endoplasmic reticulum (ER) tubules (PubMed:<u>27619977</u>, PubMed:<u>25612671</u>, PubMed:<u>24262037</u>). They regulate membrane morphogenesis in the ER by promoting tubular ER production (PubMed:<u>27619977</u>, PubMed:<u>25612671</u>, PubMed:<u>24262037</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).

Images



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.