

RTN4 antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI12714**Specification**

RTN4 antibody - middle region - Product Information

Application	WB
Primary Accession	O9NQC3
Other Accession	NM_207520 , NP_997403
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Sheep, Horse, Bovine, Guinea Pig, Dog
Predicted	Human, Mouse, Rat, Rabbit, Pig, Chicken, Sheep, Horse, Bovine, Guinea Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42kDa KDa

RTN4 antibody - middle region - Additional Information**Gene ID** 57142

Alias Symbol ASY, NI220/250, NOGO, NOGO-A, NOGOC, NSP, NSP-CL, Nbla00271, Nbla10545, Nogo-B, Nogo-C, RTN-X, RTN4-A, RTN4-B1, RTN4-B2, RTN4-C

Other Names

Reticulon-4, Foocen, Neurite outgrowth inhibitor, Nogo protein, Neuroendocrine-specific protein, NSP, Neuroendocrine-specific protein C homolog, RTN-x, Reticulon-5, RTN4, KIAA0886, NOGO

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-RTN4 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

RTN4 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

RTN4 antibody - middle region - Protein Information**Name** RTN4 ([HGNC:14085](#))**Function**

Required to induce the formation and stabilization of endoplasmic reticulum (ER) tubules (PubMed:24262037, PubMed:25612671),

PubMed:27619977). They regulate membrane morphogenesis in the ER by promoting tubular ER production (PubMed:24262037, PubMed:25612671, PubMed:27619977, PubMed:27786289). They influence nuclear envelope expansion, nuclear pore complex formation and proper localization of inner nuclear membrane proteins (PubMed:26906412). 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

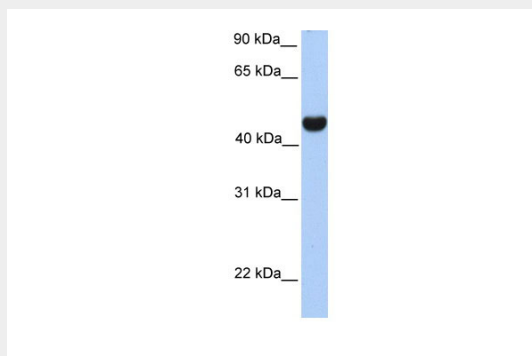
Isoform A: is specifically expressed in brain and testis and weakly in heart and skeletal muscle. Isoform B: widely expressed except for the liver. Highly expressed in endothelial cells and vascular smooth muscle cells, including blood vessels and mesenteric arteries (PubMed:15034570, PubMed:21183689).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

RTN4 antibody - middle region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

RTN4 antibody - middle region - Images



WB Suggested Anti-RTN4 Antibody Titration: 0.2-1 µg/ml

Positive Control: Human brain

RTN4 antibody - middle region - References

Hu, F. (2008) J. Neurosci. 28(5), 1262-1269 Reconstitution and Storage: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles. Publications: Beetz, C. et al. A spastic paraplegia mouse model reveals REEP1-dependent ER shaping. J. Clin. Invest. 123, 4273-82 (2013). WB, Human, Bovine, Dog, Rat, Horse, Rabbit, Sheep, Pig, Mouse, Guinea pig, Zebrafish 24051375