

# RTN4 antibody - middle region

Rabbit Polyclonal Antibody

Catalog # AI12714

## Product Information

<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">Q9NQC3</a>
<b>Other Accession</b>	<a href="#">NM_207520</a> , <a href="#">NP_997403</a>
<b>Reactivity</b>	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine, Sheep
<b>Predicted</b>	Human, Mouse, Rat, Rabbit, Pig, Chicken, Dog, Guinea Pig, Horse, Bovine, Sheep
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	129931

## Additional Information

<b>Gene ID</b>	57142
<b>Alias Symbol</b>	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
<b>Other Names</b>	Reticulon-4, Focnen, Neurite outgrowth inhibitor, Nogo protein, Neuroendocrine-specific protein, NSP, Neuroendocrine-specific protein C homolog, RTN-x, Reticulon-5, RTN4, KIAA0886, NOGO
<b>Format</b>	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
<b>Reconstitution &amp; Storage</b>	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.
<b>Precautions</b>	RTN4 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

<b>Name</b>	RTN4 ( <a href="#">HGNC:14085</a> )
<b>Function</b>	Required to induce the formation and stabilization of endoplasmic reticulum (ER) tubules (PubMed: <a href="#">24262037</a> , PubMed: <a href="#">25612671</a> , PubMed: <a href="#">27619977</a> ). They regulate membrane morphogenesis in the ER by promoting tubular ER production (PubMed: <a href="#">24262037</a> , PubMed: <a href="#">25612671</a> , PubMed: <a href="#">27619977</a> , PubMed: <a href="#">27786289</a> ). They influence nuclear envelope expansion, nuclear pore complex formation and proper localization of inner nuclear membrane proteins (PubMed: <a href="#">26906412</a> ). 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

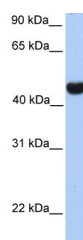
### Tissue Location

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.

## References

Hu,F.(2008)J.Neurosci.28(5),1262-1269ReconstitutionandStorage:Forshorttermuse,storeat2-8Cupto1week.For longtermstorage,storeat-20Cinsmallaliquotstopreventfreeze-thawcycles.Publications:Beetz,C.etal.As pasticpa raplegiamousemodelrevealsREEP1-dependentERshaping.J.Clin.Invest.123,4273-82(2013).WB,Human,Bovine, Dog,Rat,Horse,Rabbit,Sheep,Pig,Mouse,Guineapig,Zebrafish24051375

## Images



WB Suggested Anti-RTN4 Antibody Titration: 0.2-1 µg/ml  
Positive Control: Human brain

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