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RTN4 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI12714

Product Information

Application	WB
Primary Accession	Q9NQC3
Other Accession	NM_207520, NP_997403
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine, Sheep
Predicted	Human, Mouse, Rat, Rabbit, Pig, Chicken, Dog, Guinea Pig, Horse, Bovine, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	129931

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.

Protein Information

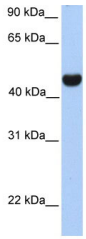
Name	RTN4 (HGNC:14085)
Function	Required to induce the formation and stabilization of endoplasmic reticulum (ER) tubules (PubMed:24262037, PubMed:25612671, PubMed:27619977). They regulate membrane morphogenesis in the ER by promoting tubular ER production (PubMed:24262037, PubMed:25612671, PubMed:27619977, 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.

References

Hu,F.(2008)J.Neurosci.28(5),1262-1269ReconstitutionandStorage:Forshorttermuse,storeat2-8Cupto1week.Forlongtermstorage,storeat-20Cinsmallaliquotstopreventfreeze-thawcycles.Publications:Beetz,C.etal.AspasticparaplegiamousemodelrevealsREEP1-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