RTN4 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	RTN4, Polyclonal Antibody
Full Product Name	RTN4 Conjugated Antibody
Product Gene Name	anti-RTN4 antibody
Product Synonym Names	ASY; NSP; NOGO; NOGOC; RTN-X; NOGO-A; NSP-CL; Nogo-B; Nogo-C; RTN4-A; RTN4-C; RTN4-B1; RTN4-B2; NI220/250; Nbla00271; Nbla10545
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Specificity	The antibody detects endogenous levels of total RTN4 protein.
Preparation and Storage	Store at 4 degree C for 6 months.
Molecular Weight	20.6 kDa (180aa)
OMIM	604475
3D Structure	ModBase 3D Structure for Q9NQC3
Immunogen	Synthetic peptide corresponding to residues near the C terminal of human Reticulon 4
Conjugation	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Excitation Emission	AF350: 346nm/442nm
Applications Tested/Suitable for anti-RTN4 antibody	Most Applications
Application Notes for anti-RTN4 antibody	Suggested Dilution: AF350 conjugated: most applications: 1:50-1:250 AF405 conjugated: most applications: 1:50-1:250 AF488 conjugated: most applications: 1:50-1:250 AF555 conjugated: most applications: 1:50-1:250 AF594 conjugated: most applications: 1:50-1:250 AF647 conjugated: most applications: 1:50-1:250 AF680 conjugated: most applications: 1:50-1:250 AF750 conjugated: most applications: 1:50-1:250 Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1:50-1:1000
Related Product Information for anti-RTN4 antibody	This gene belongs to the family of reticulon encoding genes. Reticulons are associated with the endoplasmic reticulum, and are involved in neuroendocrine secretion or in membrane trafficking in neuroendocrine cells. The product of this gene is a potent neurite outgrowth inhibitor which may also help block the regeneration of the central nervous system in higher vertebrates. Alternatively spliced transcript variants derived both from differential splicing and differential promoter usage and encoding different isoforms have been identified.
Other Notes	Small volumes of anti-RTN4 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for RTN4 purchase	MBS9447634 is an antibody targeting RTN4. Also known as RTN4 Conjugated Antibody. Reactive in Human, Mouse. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for RTN4. It may not necessarily be applicable to this product.

NCBI GI #	5453922
NCBI GeneID	5368
NCBI Accession #	NP_006219
UniProt Primary Accession #	Q9NQC3
UniProt Secondary Accession #	Q6FH16; B7Z749
UniProt Related Accession #	Q13519
GenBank Nucleotide #	NM_006228.4
NCBI Official Full Name	prepronociceptin isoform 1 preproprotein
NCBI Official Synonym Full Names	prepronociceptin
NCBI Official Symbol	PNOC
NCBI Official Synonym Symbols	NOP; OFQ; N/OFQ; PPNOC; ppN/OFQ
UniProt Protein Name	Reticulon-4
UniProt Synonym Protein Names	Foocen; Neurite outgrowth inhibitor; Nogo protein; Neuroendocrine-specific protein; NSP; Neuroendocrine-specific protein C homolog; RTN-x; Reticulon-5
Protein Family	Reticulon
UniProt Gene Name	RTN4
UniProt Synonym Gene Names	KIAA0886; NOGO; Nogo protein; NSP
UniProt Entry Name	RTN4_HUMAN
NCBI Protein Information	prepronociceptin
NCBI Summary for RTN4	This gene encodes a preproprotein that is proteolytically processed to generate multiple protein products. These products include nociceptin, nocistatin, and orphanin FQ2 (OFQ2). Nociceptin, also known as orphanin FQ, is a 17-amino acid neuropeptide that binds to the nociceptin receptor to induce increased pain sensitivity, and may additionally regulate body temperature, learning and memory, and hunger. Another product of the encoded preproprotein, nocistatin, may inhibit the effects of nociceptin. [provided by RefSeq, Jul 2015]

UniProt Comments for RTN4	Nogo: Developmental neurite growth regulatory factor with a role as a negative regulator of axon-axon adhesion and growth, and as a facilitator of neurite branching. Regulates neurite fasciculation, branching and extension in the developing nervous system. Involved in down-regulation of growth, stabilization of wiring and restriction of plasticity in the adult CNS. Regulates the radial migration of cortical neurons via an RTN4R-LINGO1 containing receptor complex. Isoform 2 reduces the anti-apoptotic activity of Bcl-xl and Bcl-2. This is likely consecutive to their change in subcellular location, from the mitochondria to the endoplasmic reticulum, after binding and sequestration. Isoform 2 and isoform 3 inhibit BACE1 activity and amyloid precursor protein processing. 6 isoforms of the human protein are produced by alternative splicing. Protein type: Endoplasmic reticulum; Membrane protein, integral; Membrane protein, multi-pass; Motility/polarity/chemotaxis; Inhibitor; Cell development/differentiation Chromosomal Location of Human Ortholog: 2p16.3 Cellular Component: cell projection; cell soma; endoplasmic reticulum; plasma membrane; integral to endoplasmic reticulum membrane; nuclear envelope; intracellular Molecular Function: protein binding Biological Process: regulation of apoptosis; nerve growth factor receptor signaling pathway; apoptosis; cerebral cortex radial glia guided migration; axonal fasciculation; negative regulation of axonogenesis; negative regulation of cell growth; angiogenesis; negative regulation of axon extension; regulation of axonogenesis; regulation of cell migration
Research Articles on RTN4	**1.** found differences in Neonatal Abstinence Syndrome outcomes depending on PNOC and COMT SNP genotype.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-antibody/rtn4/9447634