

Product datasheet for **BM6041P**

Reticulon 1 (RTN1) (Isoform RTN1-C) Mouse Monoclonal Antibody [Clone ID: RNL-4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	RNL-4
Applications:	FC, IF, IHC, WB
Recommended Dilution:	RNL-4 is suitable for Immunoblotting, Immunocytochemistry, Immunohistochemistry on Frozen Sections and Flow Cytometry. <i>Recommended Dilutions:</i> 1/50-1/100 for Flow Cytometry, and for Immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent, and 1/100-1/500 for Immunoblotting.
Reactivity:	Human, Porcine, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Synthetic peptide encompassing the unique 20 N-terminal amino acid sequence of Reticulon-1C.
Specificity:	RNL-4 recognizes an epitope located within the first 20 amino acids of Reticulon-1C (NSP-C). RNL-4 reacts with peripheral nerves and ganglia of various tissues and cross-reacts with smooth muscle cells and myoepithelium. In the central nervous system it reacts with the neurohypophysis and pars intermedia of the pituitary gland, and a weak diffuse staining was observed in neurons of the granular and molecular layer of the cerebellar cortex, while glial cells, cerebellar medulla and Purkinje cells are negative. Reticulon-1 has been found to indicate neuronal differentiation and to be downregulated in neurological pathologies.
Formulation:	PBS State: Purified State: Liquid purified IgG fraction Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Conjugation:	Unconjugated



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Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freeze-thaw cycles.
Stability:	Shelf life: One year from despatch.
Gene Name:	reticulon 1
Database Link:	Entrez Gene 6252 Human Q16799
Background:	<p>Recently, a novel gene family has been identified and characterized, designated the Reticulons because the proteins encoded by these genes are anchored to the membranes of the endoplasmic reticulum. Reticulon-1 was formerly designated NSP for Neuroendocrine-Specific-Protein, because it is specifically expressed in neural and neuroendocrine tissues. The NSP-gene has been mapped by fluorescence in situ hybridization to human chromosome 14q21-q22. The NSP-gene encodes three overlapping proteins, i.e. Reticulon-1A (NSPA), Reticulon-1B (NSP-B), and Reticulon-1C (NSPC).</p> <p>These proteins were found to be anchored to membranes of the endoplasmic reticulum through their common carboxy-terminal regions. Reticulon-1A is a protein with a molecular weight (MW) of about 135 kDa, which occurs in various isoforms presumably depending on the degree of phosphorylation of serine residues. In lung cancer diagnosis Reticulon-1A appeared to be a reliable marker for the detection of neuroendocrine differentiation, since most of the small cell lung carcinoma (SCLC) and carcinoid tumors showed expression of Reticulon-1A. Reticulon-1B is a phosphoprotein with a MW of 45 kDa and is restricted to the lung cancer cell line NCI-H82. Reticulon-1B is so far not found in human tissues. Reticulon-1C is a protein with a MW of 23 kDa which is not phosphorylated and is found with Reticulon-1A in SCLC (cell lines) and not in non-SCLC (cell cultures).</p>
Synonyms:	Reticulon-1, RTN1, NSP, Neuroendocrine-specific protein

Product images:



Immunoblotting of RNL-4 recognizing NSP-C Reticulon 1-C (23 kDa) in extract from neuroblastoma cell line LA-N-5.