

Product datasheet for **BM6038P**

Reticulon 1 (RTN1) (Isoform RTN1-A) Mouse Monoclonal Antibody [Clone ID: MON162]

Product data:

Product Type:	Primary Antibodies
Clone Name:	MON162
Applications:	IF, IHC, WB
Recommended Dilution:	Suitable for Immunocytochemistry, Immunohistochemistry on frozen and paraffin embedded tissue, and Immunoblotting. <u>Recommended dilutions:</u> 1/100-1/200 for Immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent and 1/100-1/1000 for Immunoblotting applications.
Reactivity:	Hamster, Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Partially purified bacterially expressed Reticulon-1A (NSP-A) hybrid protein (β -GAL-NSP-A 6-776).
Specificity:	MON-162 exclusively recognizes the 135 kD Reticulon-1A protein in immunoblots of NCI-H82 and other SCLC cell lines, and stains normal and pathological neural and neuroendocrine tissues.
Formulation:	PBS with 0.09% sodium azide as preservative. State: Purified State: Liquid purified IgG fraction.
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store the antibody (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



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Background:

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). 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). The epitope of MON-162 is located between amino acid residues 338-422 of Reticulon-1A.

Synonyms:

Reticulon-1, RTN1, NSP, Neuroendocrine-specific protein