

## Product datasheet for **BM6040P**

### Reticulon 1 (RTN1) (Isoform RTN1-A/B) Mouse Monoclonal Antibody [Clone ID: RNL-3]

#### Product data:

|                       |   |
|-----------------------|---|
| Product Type:         | Primary Antibodies  |
| Clone Name:           | RNL-3   |
| Applications:         | FC, IF, IHC, WB   |
| Recommended Dilution: | <b>Immunoblotting:</b> 1/100-1/500.<br><b>Immunocytochemistry.</b><br><b>Flow Cytometry:</b> 1/100-1/200.<br><b>Immunohistochemistry on Frozen Sections:</b> 1/100-1/200 with ABC as detection reagent.<br><b>Immunohistochemistry on Paraffin Sections:</b> 1/100-1/200 with ABC as detection reagent.   |
| Reactivity:           | Human, Monkey, Rabbit   |
| Host:                 | Mouse   |
| Isotype:              | IgG1  |
| Clonality:            | Monoclonal  |
| Immunogen:            | Small cell lung cancer cell line NCI-H82.   |
| Specificity:          | RNL-3 recognizes an epitope located within the region of amino acids 421-589 of the neuroendocrine specific protein Reticulon-1A (NSP-A), which is also present in the N-terminal part of Reticulon-1B (NSP-B).<br>In normal tissues, RNL-3 reacts with brain Purkinje cells, pancreatic islet cells, cells in the pituitary gland and some (peripheral) nerve fibers. In addition, a few epithelia show positive staining. |
| Formulation:          | Phosphate buffered saline (PBS)<br>State: Purified<br>State: Liquid purified IgG fraction<br>Preservative: 0.09% Sodium Azide   |
| Concentration:        | lot specific  |
| Conjugation:          | Unconjugated  |
| Storage:              | Store the antibody undiluted at 2-8°C for one month or (in small aliquots) at -20°C for longer.<br>Avoid repeated freeze-thaw cycles.   |
| Stability:            | Shelf life: One year from despatch.   |
| Gene Name:            | reticulon 1   |



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**Database Link:** [Entrez Gene 6252 Human Q16799](#)

**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).

**Synonyms:** Reticulon-1, RTN1, NSP, Neuroendocrine-specific protein