

Product datasheet for BM6037P

OriGene Technologies, Inc.

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Reticulon 1 (RTN1) (Isoform RTN1-A) Mouse Monoclonal Antibody [Clone ID: MON161]

Product data:

Product Type: Primary Antibodies

Clone Name: MON161

Applications: FC, IF, IHC, WB

Recommended Dilution: Suitable for Immunoblotting, Immunocytochemistry, Immunohistochemistry on frozen

sections and paraffin-embedded tissues and Flow cytometry.

<u>Recommended dilutions</u>: 1/50-1/100 for Flow cytometry, and for Immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent, and 1/50-

1/500 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-161 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.

The epitope of MON-161 is located between amino acid residues 174-337 of Reticulon-1A.

Formulation: PBS

State: Purified

State: Liquid purified IgG fraction. Preservative: 0.09% Sodium Azide

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

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 sofar 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