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RTN3 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1297a

Specification

RTN3 Antibody - Product Information

Application	**IHC, ICC, IF**
Primary Accession	O95197
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a**
Calculated MW	**113kDa KDa**

Description
RTN3, reticulon 3. The reticulons are a group of highly conserved genes with preferential expression in neuroendocrine tissues. RTN3 may be involved in membrane trafficking in the early secretory pathway. Inhibits BACE1 activity and amyloid precursor protein processing. May induce caspase-8 cascade and apoptosis. May favor BCL2 translocation to the mitochondria upon endoplasmic reticulum stress. In case of enteroviruses infection, RTN3 may be involved in the viral replication or pathogenesis. There are 5 isoforms.

Immunogen
Purified recombinant fragment of RTN3 expressed in E. Coli.

Formulation
Ascitic fluid containing 0.03% sodium azide.

RTN3 Antibody - Additional Information

Gene ID 10313

Other Names
Reticulon-3, Homolog of ASY protein, HAP, Neuroendocrine-specific protein-like 2, NSP-like protein 2, Neuroendocrine-specific protein-like II, NSP-like protein II, NSPLII, RTN3, ASYIP, NSPL2

Dilution
IHC~~1/200 - 1/1000
ICC~~1:200~~1000
IF~~1:200~1000.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
RTN3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

RTN3 Antibody - Protein Information

Name RTN3

Synonyms ASYIP, NSPL2

Function
May be involved in membrane trafficking in the early secretory pathway. Inhibits BACE1 activity and amyloid precursor protein processing. May induce caspase-8 cascade and apoptosis. May favor BCL2 translocation to the mitochondria upon endoplasmic reticulum stress. Induces the formation of endoplasmic reticulum tubules (PubMed:25612671). Also acts as an inflammation-resolving regulator by interacting with both TRIM25 and RIGI, subsequently impairing RIGI 'Lys-63'-linked polyubiquitination leading to IRF3 and NF-kappa-B inhibition.

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein

Tissue Location
Isoform 3 is widely expressed, with highest levels in brain, where it is enriched in neuronal cell bodies from gray matter (at protein level). Three times more abundant in macula than in peripheral retina. Isoform 1 is expressed at high levels in brain and at low levels in skeletal muscle. Isoform 2 is only found in melanoma

RTN3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RTN3 Antibody - Images

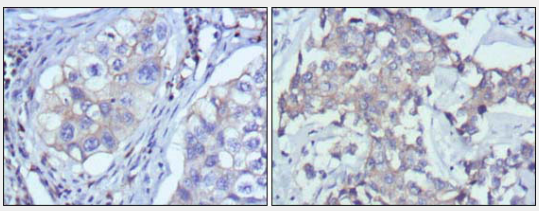


Figure 1: Immunohistochemical analysis of paraffin-embedded human lung cancer (left) and breast cancer (right) using RTN3 mouse mAb with DAB staining.

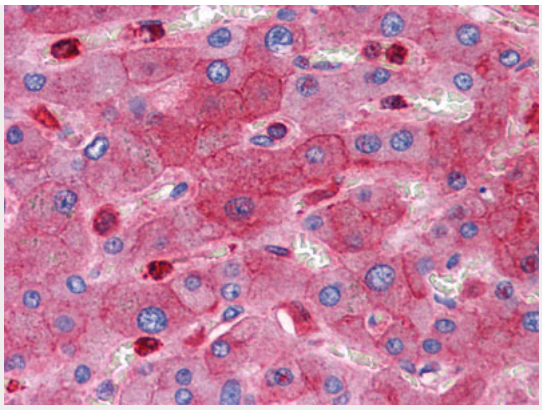


Figure 2: Immunohistochemical analysis of paraffin-embedded human Liver tissues using RTN3 mouse mAb

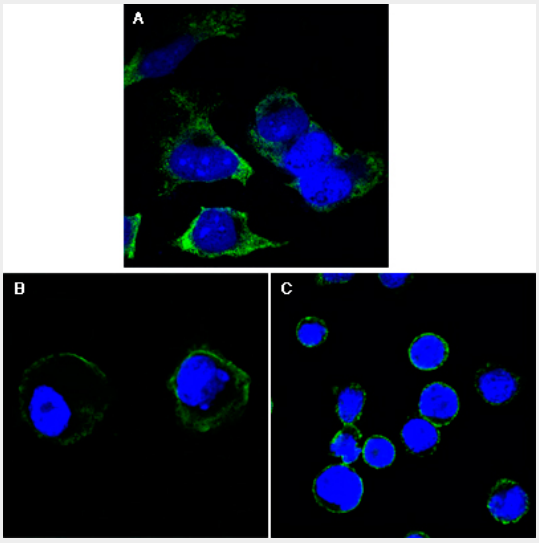


Figure 1: Confocal immunofluorescence analysis of Hela (A), A431 (B) and THP-1 (C) cells using RTN3 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

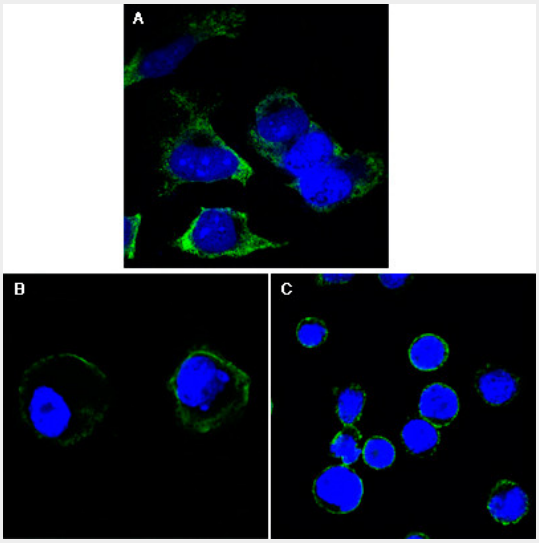


Figure 1: Confocal immunofluorescence analysis of Hela (A), A431 (B) and THP-1 (C) cells using anti-RTN3 monoclonal antibody (green). Blue: DRAQ5 fluorescent DNA dye.

RTN3 Antibody - References

1. Biochem Biophys Res Commun. 2005 Sep 9;334(4):1198-205. 2. Brain Res Mol Brain Res. 2005 Aug 18;138(2):236-43. 3. FASEB J. 2003 Jul;17(10):1238-47.