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RTN3 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1297a

Product Information

Application	IHC, E
Primary Accession	O95197
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	10A8
Isotype	IgG2a
Calculated MW	112611
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.

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 E~~N/A
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.

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

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.

Images

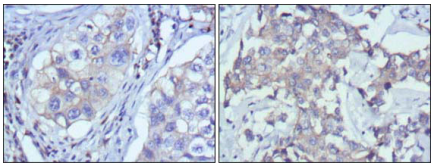


Figure 1: Immunohistochemical analysis of paraffin-embedded human lung cancer (left) and breast cancer (right) using RTN3 mouse mAb with DAB staining.

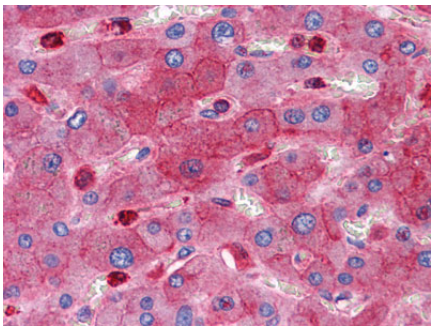


Figure 2: Immunohistochemical analysis of paraffin-embedded human Liver tissues using RTN3 mouse mAb

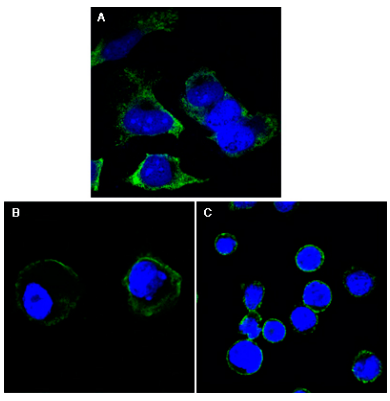


Figure 1: Confocal immunofluorescence analysis of Hela (A), A431 (B) and THP-1 (C) cells using RTN3 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

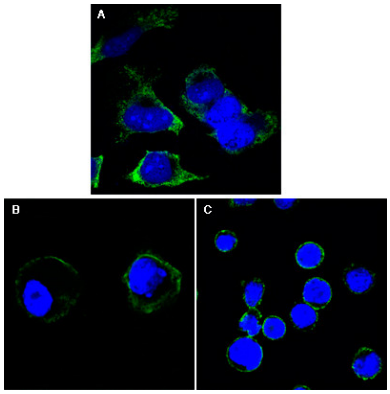


Figure 1: Confocal immunofluorescence analysis of Hela (A), A431 (B) and THP-1 (C) cells using anti-RTN3 monoclonal antibody (green). Blue: DRAQ5 fluorescent DNA dye.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.