

Anti-RTN3 Antibody
Catalog # ABO11566**Specification**

Anti-RTN3 Antibody - Product Information

Application	IHC, WB
Primary Accession	O95197
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Reticulon-3(RTN3) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-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

Calculated MW

112611 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

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

Tissue Specificity

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. .

Protein Name

Reticulon-3

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human RTN3(1017-1032aa EKIQAQLPGIAKKKAE), identical to the related mouse and rat sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Contains 1 reticulon domain.

Anti-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

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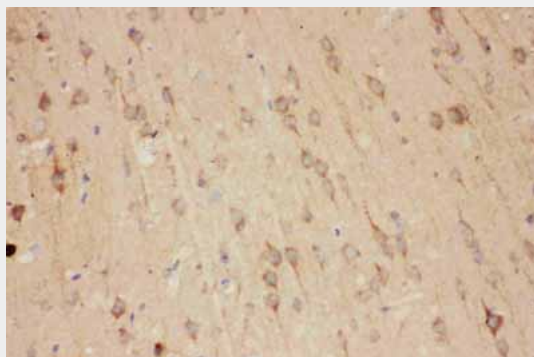
Anti-RTN3 Antibody - Protocols

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

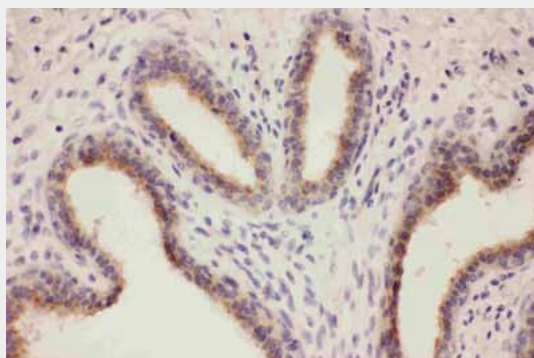
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-RTN3 Antibody - Images



Anti-RTN3 antibody, ABO11566, IHC(P)IHC(P): Rat Brain Tissue



Anti-RTN3 antibody, ABO11566, IHC(P)IHC(P): Human Mammary Cancer Tissue



Anti-RTN3 antibody, ABO11566, Western blottingAll lanes: Anti RTN3 (ABO11566) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: U87 Whole Cell Lysate at 40ugPredicted bind size: 116KDObserved bind size: 150KD

Anti-RTN3 Antibody - Background

Reticulon-3, also known as RTN3 or NSPL2, is a protein that in humans is encoded by the RTN3

gene. It is mapped to 11q13, which is between markers D11S4535 and D11S4627. This gene belongs to the reticulon family of highly conserved genes that are preferentially expressed in neuroendocrine tissues. This family of proteins interact with, and modulate the activity of beta-amyloid converting enzyme 1 (BACE1), and the production of amyloid-beta. RTN3 colocalized with BACE1 in neurons of human brain gray matter, and overexpression of RTN3 in vitro inhibited BACE1 activity and decreased amyloid precursor protein processing.