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# RTN3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58700

## Product Information

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| **Application** | IHC-P, IHC-F, IF, E |
| **Primary Accession** | O95197 |
| **Reactivity** | Rat, Pig, Dog, Bovine |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 112611 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human NSPL2/RTN3 |
| **Epitope Specificity** | 931-1032/1032 |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SUBCELLULAR LOCATION** | Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. |
| **SIMILARITY** | Contains 1 reticulon domain. |
| **SUBUNIT** | Homodimer. Interacts with ATL1 (By similarity). Interacts with RTN4. Isoform 3 interacts with BACE1, BACE2, BCL2 and FADD. Interacts with Coxsackievirus A16, enterovirus 71 and poliovirus P2C proteins. Interacts with ATL2. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | 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. |

## Additional Information

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| **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 |
| **Target/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. |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000 |

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| **Format** | 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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| **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 |