10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# PSEN2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20599a

## Product Information

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| **Application** | WB, FC, E |
| **Primary Accession** | P49810 |
| **Reactivity** | Human, Rat, Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB30801 |
| **Calculated MW** | 50140 |

## Additional Information

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| **Gene ID** | 5664 |
| **Other Names** | Presenilin-2, PS-2, 3423-, AD3LP, AD5, E5-1, STM-2, Presenilin-2 NTF subunit, Presenilin-2 CTF subunit, PSEN2, AD4, PS2, PSNL2, STM2 |
| **Target/Specificity** | This PSEN2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 32-65 amino acids from the N-terminal region of human PSEN2(Presenilin-2 NTF subunit). |
| **Dilution** | WB~~1:1000 FC~~1:25 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | PSEN2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | PSEN2 ( HGNC:9509) |
| **Function** | Catalytic subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (amyloid- beta precursor protein) (PubMed:10497236, PubMed:10652302, PubMed:16752394, PubMed:27293189, PubMed:36272978). Selectively cleaves late |

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| | endosomal/lysosomal localized substrates and generates the prominent pool of intracellular amyloid beta that contains longer amyloid beta (PubMed:27293189). The holoprotein functions as a calcium- leak channel that allows the passive movement of calcium from endoplasmic reticulum to cytosol and is involved in calcium homeostasis (PubMed:16959576). Is a regulator of mitochondrion-endoplasmic reticulum membrane tethering and modulates calcium ions shuttling between ER and mitochondria (PubMed:21285369). |
| **Cellular Location** | Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Late endosome membrane. Lysosome membrane. Note=Late endosome/lysosome localization is dependent of the phosphorylation-mediated interaction with the AP1G1 (PubMed:27293189). Also highly enriched in mitochondria-associated endoplasmic reticulum membrane contact site (By similarity) {ECO:0000250\|UniProtKB:Q61144, ECO:0000269\|PubMed:27293189} |
| **Tissue Location** | [Isoform 1]: Expressed in the placenta, skeletal muscle and heart (PubMed:8574969). Expressed in the somatodendritic compartment of hippocampal neurons (PubMed:27293189) |

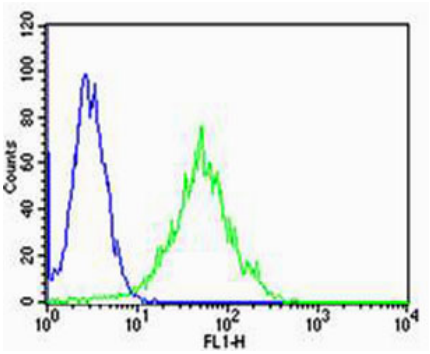
## Background

Probable catalytic subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (beta-amyloid precursor protein). Requires the other members of the gamma-secretase complex to have a protease activity. May play a role in intracellular signaling and gene expression or in linking chromatin to the nuclear membrane. May function in the cytoplasmic partitioning of proteins.

## References

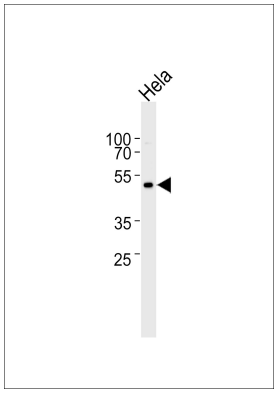

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Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.


## Images




Flow cytometric analysis of Hela cells using PSEN2(Presenilin-2 NTF subunit) Antibody (N-term)(green, Cat#AP20599a) compared to an isotype control of rabbit IgG(blue). AP20599a was diluted at 1:25 dilution. An Alexa Fluor® 488 goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody.

Western blot analysis of lysate from Hela cell line, using PSEN2(Presenilin-2 NTF subunit) Antibody (N-term)(Cat. # AP20599a). AP20599a was diluted at 1:1000. A goat




anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

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