

PSEN2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP20599a

Product Information

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

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

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

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)

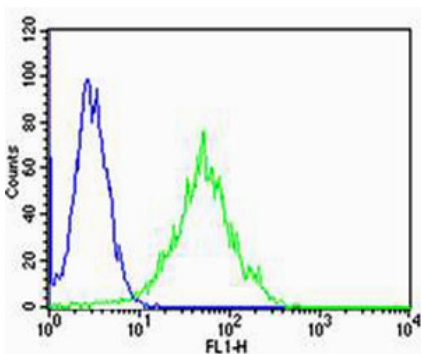
Background

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

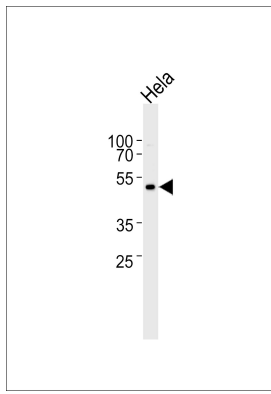
- Levy-Lahad E., et al. *Science* 269:973-977(1995).
Rogaev E.I., et al. *Nature* 376:775-778(1995).
Li J., et al. *Proc. Natl. Acad. Sci. U.S.A.* 92:12180-12184(1995).
Levy-Lahad E., et al. *Genomics* 34:198-204(1996).
Kalnina N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.

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'.