

# PSEN2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20599a

## **Product Information**

Application	WB, FC, E
Primary Accession	<u>P49810</u>
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
Synonyms	AD4, PS2, PSNL2, STM2
Function	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 (amyloid- beta

	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. 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: <u>16959576</u> ). Is a regulator of mitochondrion-endoplasmic reticulum membrane tethering and modulates calcium ions shuttling between ER and mitochondria (PubMed: <u>21285369</u> ).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein
Tissue Location	Isoform 1 is seen in the placenta, skeletal muscle and heart while isoform 2 is seen in the heart, brain, placenta, liver, skeletal muscle and kidney.

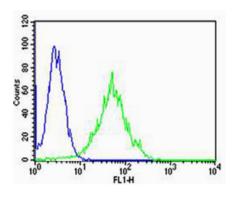
#### Background

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

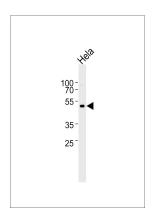
Levy-Lahad E.,et al.Science 269:973-977(1995). Rogaev E.I.,et al.Nature 376:775-778(1995). Li J.,et al.Proc. Natl. Acad. Sci. U.S.A. 92:12180-12184(1995). Levy-Lahad E.,et al.Genomics 34:198-204(1996). Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.

#### 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'.