

# PSEN2(Presenilin-2 CTF subunit) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20576c

#### **Product Information**

**Application** WB, IHC-P, E **Primary Accession** P49810

**Reactivity** Human, Rat, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB48132Calculated MW50140

#### **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(Presenilin-2 CTF subunit) antibody is generated from a rabbit

immunized with a KLH conjugated synthetic peptide between 401-445 amino acids from the C-terminal region of human PSEN2(Presenilin-2 CTF subunit).

**Dilution** WB~~1:1000 IHC-P~~1:100~500 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(Presenilin-2 CTF subunit) Antibody (C-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: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

**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.

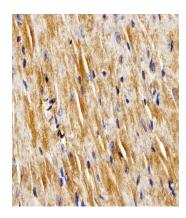
## **Background**

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

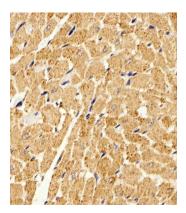
Levy-Lahad E., et al. Science 269:973-977(1995).
Rogaev E.I., et al. Nature 376:775-778(1995).
Li J., et al. Proc. Natl. Acad. Sci. U.S.A. 92:12180-12184(1995).
Levy-Lahad E., et al. Genomics 34:198-204(1996).
Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.

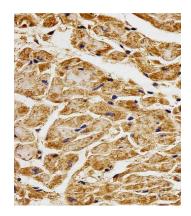
### **Images**



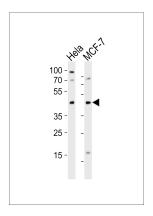
Immunohistochemical analysis of paraffin-embedded M.heart section using PSEN2(Presenilin-2 CTF subunit) Antibody (C-term)(Cat#AP20576c). AP20576c was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

Immunohistochemical analysis of paraffin-embedded R.heart section using PSEN2(Presenilin-2 CTF subunit) Antibody (C-term)(Cat#AP20576c). AP20576c was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.





Immunohistochemical analysis of paraffin-embedded H.heart section using PSEN2(Presenilin-2 CTF subunit) Antibody (C-term)(Cat#AP20576c). AP20576c was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Western blot analysis of lysates from Hela, MCF-7 cell line (from left to right), using PSEN2(Presenilin-2 CTF subunit) Antibody (C-term) (Cat. #AP20576c). AP20576c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

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