

## presenilin 1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54178

## **Specification**

presenilin 1 Polyclonal Antibody - Product Information

Application IHC-P Primary Accession P97887

Reactivity Rat, Pig, Dog,

Cow

Host Rabbit
Clonality Polyclonal
Calculated MW 52790

presenilin 1 Polyclonal Antibody - Additional Information

**Gene ID** 29192

#### Other Names

Presenilin-1, PS-1, 3.4.23.-, Protein S182, Presenilin-1 NTF subunit, Presenilin-1 CTF subunit, Presenilin-1 CTF12, PS1-CTF12, Psen1, Psnl1

## **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.

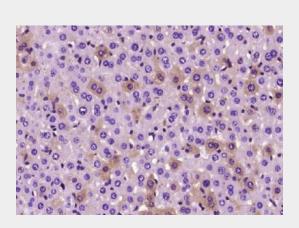
presenilin 1 Polyclonal Antibody - Protein Information

Name Psen1

Synonyms Psnl1

## **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



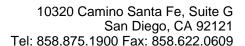
Paraformaldehyde-fixed, paraffin embedded (mouse liver tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (presenilin 1) Monoclonal Antibody, Unconjugated (bs-0024M) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.



protein). Requires the presence of the other members of the gamma-secretase complex for protease activity. Plays a role in Notch and Wnt signaling cascades and regulation of downstream processes via its role in processing key regulatory proteins, and by regulating cytosolic CTNNB1 levels. Stimulates cell-cell adhesion via its interaction with CDH1; this stabilizes the complexes between CDH1 (E- cadherin) and its interaction partners CTNNB1 (beta-catenin), CTNND1 and JUP (gamma-catenin). Under conditions of apoptosis or calcium influx, cleaves CDH1. This promotes the disassembly of the complexes between CDH1 and CTNND1, JUP and CTNNB1, increases the pool of cytoplasmic CTNNB1, and thereby negatively regulates Wnt signaling (By similarity). Required for normal embryonic brain and skeleton development, and for normal angiogenesis (By similarity). Mediates the proteolytic cleavage of EphB2/CTF1 into EphB2/CTF2 (By similarity). The holoprotein functions as a calcium-leak channel that allows the passive movement of calcium from endoplasmic reticulum to cytosol and is therefore involved in calcium homeostasis. Involved in the regulation of neurite outgrowth (By similarity). Is a regulator of presynaptic facilitation, spike transmission and synaptic vesicles replenishment in a process that depends on gamma-secretase activity. It acts through the control of SYT7 presynaptic expression (PubMed:<a href=" http://www.uniprot.org/citations/30429473" target=" blank">30429473</a>).

#### **Cellular Location**

Endoplasmic reticulum {ECO:0000250|UniProtKB:P49768}. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P49768}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P49768}. Golgi apparatus membrane {ECO:0000250|UniProtKB:P49768}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P49768}. Cytoplasmic granule {ECO:0000250|UniProtKB:P49768}. Cell membrane {ECO:0000250|UniProtKB:P49768}: Multi-pass membrane protein {ECO:0000250|UniProtKB:P49768}. Cell projection, growth cone





{ECO:0000250|UniProtKB:P49768}. Early endosome {ECO:0000250|UniProtKB:P49768}. Early endosome membrane {ECO:0000250|UniProtKB:P49768}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P49768}. Cell projection, axon {ECO:0000250|UniProtKB:Q4JIM4}. Cell junction, synapse {ECO:0000250|UniProtKB:Q4JIM4}. Cell projection, neuron projection {ECO:0000250|UniProtKB:P49768}. Note=Translocates with bound NOTCH1 from the endoplasmic reticulum and/or Golgi to the cell surface Colocalizes with CDH1/2 at sites of cell-cell contact. Colocalizes with CTNNB1 in the endoplasmic reticulum and the proximity of the plasma membrane. Also present in azurophil granules of neutrophils Colocalizes with UBQLN1 in the cell membrane and in cytoplasmic juxtanuclear structures called aggresomes {ECO:0000250|UniProtKB:P49768}

### **Tissue Location**

Detected in embryonic and adult brain.

# presenilin 1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture