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Presenilin 2 (PSEN2) Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP6232a

Specification

Presenilin 2 (PSEN2) Antibody (N-term) Blocking peptide - Product Information

Primary Accession P49810

Presenilin 2 (PSEN2) Antibody (N-term) Blocking peptide - 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
The synthetic peptide sequence used to generate the antibody AP6232a was selected from the N-term region of human PSEN2 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Presenilin 2 (PSEN2) Antibody (N-term) Blocking peptide - Protein Information

Name PSEN2

Presenilin 2 (PSEN2) Antibody (N-term) Blocking peptide - Background

Alzheimer's disease (AD) patients with an inherited form of the disease carry mutations in the presenilin proteins (PSEN1; PSEN2) or the amyloid precursor protein (APP). These disease-linked mutations result in increased production of the longer form of amyloid-beta (main component of amyloid deposits found in AD brains). Presenilins are postulated to regulate APP processing through their effects on gamma-secretase, an enzyme that cleaves APP. Also, it is thought that the presenilins are involved in the cleavage of the Notch receptor, such that that they either directly regulate gamma-secretase activity or themselves are protease enzymes.

Presenilin 2 (PSEN2) Antibody (N-term) Blocking peptide - References

Ezquerra, M., et al., Arch. Neurol. 60(8):1149-1151 (2003).Beher, D., et al., Biochemistry 42(27):8133-8142 (2003).Di Natale, M., et al., Neurosci. Lett. 343(3):210-212 (2003).Alves da Costa, C., et al., J. Biol. Chem. 278(14):12064-12069 (2003).Gu, Y., et al., J. Biol. Chem. 278(9):7374-7380 (2003).

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.

Presenilin 2 (PSEN2) Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides