

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human PSENEN in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 665521
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Peptide containing human PSENEN Gly89-Gly98 Accession # Q9NZ42
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

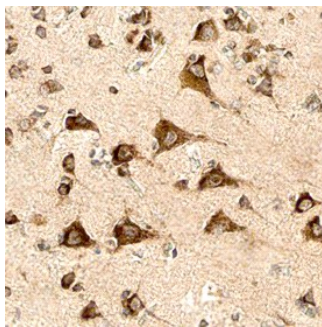
**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

**DATA**

**Immunohistochemistry**



**PSENEN in Human Brain.** PSENEN was detected in immersion fixed paraffin-embedded sections of human Alzheimer's brain using Mouse Anti-Human PSENEN Monoclonal Antibody (Catalog # MAB6859) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm and neurites of neurons. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

Gamma-secretase subunit PSENEN, also called PEN-2 (Presenilin enhancer protein 2) is a 10 kDa member of the PEN-2 family. Human PSENEN is 101 amino acids (aa) in length, and is a multi-pass transmembrane protein. Residues 1-17 are on the luminal side of the endoplasmic reticulum or Golgi apparatus, where PSENEN is primarily located. Amino acids 18-38 form a transmembrane region, and aa 39-60 form a cytoplasmic segment. Another transmembrane segment is formed by residues 61-81, and residues 82-101 are located on the luminal side of the ER or cis-Golgi. Human PSENEN shares 96% aa sequence identity with mouse and rat PSENEN. Functionally, PSENEN is an essential subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and beta-amyloid precursor protein.