

DESCRIPTION

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

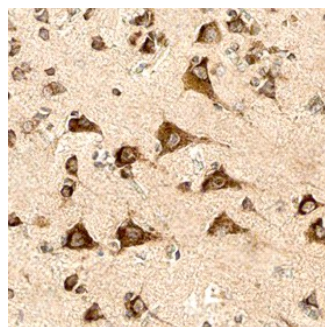
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunohistochemistry	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

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.