

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Presenilin-2 N-Terminal Fragment in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human Presenilin-1 N-Terminal Fragment (aa 1-80) and recombinant human Presenilin-2 C-Terminal Fragment (aa 308-388) is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Presenilin-2 Leu2-Thr80 Accession # P49810
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
Western Blot	0.1 µg/mL	Recombinant Human Presenilin-2 N-Terminal Fragment
Immunohistochemistry	5-15 µg/mL	Immersion fixed paraffin-embedded sections of human brain (hippocampus)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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

Presenilin-2 (PS-2 and PSEN2) is a catalytic subunit of the gamma-secretase complex. Presenilin-2 may play a role in intracellular signaling and gene expression or in linking chromatin to the nuclear membrane. Heterogeneous proteolytic processing of Presenilin-2 generates N-terminal (aa 1-297) and C-terminal (aa 298-248) fragments. Presenilin 1 and Presenilin 2 determine gamma-secretase activity, which is responsible for cleaving the amyloid precursor protein (APP). In turn, APP cleavage can produce amyloid-beta, which is the primary component of plaques in the brains of Alzheimer's disease patients. Full length, approximately 50 kDa, and the approximately 30 kDa N-terminal fragment of Presenilin-2 were identified by western blotting in extracted rodent pancreas but only the 30 kDa fragment was detected in mouse islets and human insulinoma. Within a sequence correspondent to the immunogen, human PS-2 shares 87% aa sequence identity with mouse and rat PS-2.