

Presenilin 1 Antibody, pAb, Rabbit**Cat. No.:** A00881-40**Size:** 40 µg**Synonyms:** Rabbit anti-PS1 pAb;**Description:**

Presenilin 1 (PS1) and presenilin 2 (PS2) are catalytic subunits of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (beta-amyloid precursor protein). The other members of the gamma-secretase complex are required to have protease activity. PS1 and PS2 may play a role in intracellular signaling and gene expression or in linking chromatin to the nuclear membrane. It regulates epithelial-cadherin function. Three causative genes have been identified that when mutated lead to presenile Alzheimer's disease: APP (amyloid precursor protein gene), PSEN1, and PSEN2. The presenilin 1 gene has recently been discovered on chromosome 14 and is responsible for an early onset form of Alzheimer's disease that accounts for 70-80% of the inherited forms of Alzheimer's. It is a membrane protein that has a region where at least seven mutations have been identified in family members with Alzheimer's disease. Endogenous presenilin mainly exists in a heterodimeric complex formed from the endoproteolytically processed amino-terminal (28 kD) and carboxy-terminal (≈17 kD) fragments. GenScript **Rabbit Anti-Presenilin 1 Polyclonal Antibody** is developed in rabbit hosts using a synthetic peptide, TVRSQNDNRERQEHNDRRSLGHPEPL, corresponding to amino acids 25-50 of the N-terminus of human presenilin 1. Rabbit Anti-Presenilin 1 Polyclonal Antibody is highly purified from rabbit antiserum by immunoaffinity chromatography and is supplied as a 40 µg aliquot at a concentration of 0.5 mg/ml.

Immunogen: Synthetic peptide corresponding to amino acids 25-50 (TVRSQNDNRERQEHNDRRSLGHPEPL) of the

N-terminus of human presenilin 1, which is exposed to the extracellular region, KLH conjugated.

Host: Rabbit**Antigen Synonyms:** Human**Conjugation:** Unconjugated**Formulation:**

0.5 mg/ml in PBS, pH 7.4, containing 30% glycerol, and 0.02% sodium azide

Ig Subclass: Rabbit IgG

Specificity: GenScript Rabbit Anti-Presenilin 1 Polyclonal Antibody can detect endogenous levels of the full-length protein (approx. 43-52 kD) and the N-terminal fragment of presenilin 1 (≈ 28 kD).

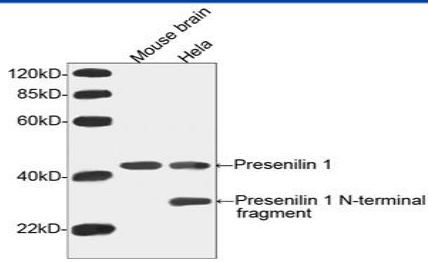
Purification: Immunoaffinity chromatography**Applications:**

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.05-0.2 µg/ml**Western blot:** 0.5-2.0 µg/ml**Species Reactivity:** Human, mouse**Storage:**

The antibody is stable for 2-3 weeks if stored at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.

Example



Western blot analysis of cell and tissue lysates using Presenilin 1 Antibody, pAb, Rabbit (GenScript, A00881, 2 µg/ml). The signal was developed with Goat Anti-Rabbit IgG (H&L) [HRP] Polyclonal Antibody (GenScript, A00098, 1:5,000) and LumiSensor™ HRP Substrate Kit (GenScript, L00221). Predicted Size: 45 kD. Observed Size: 45 kD, 32 kD.