

Rabbit anti-Human, Mouse Presenilin 1 Polyclonal Antibody | anti-PSEN1 antibody

Presenilin 1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA320886	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Presenilin 1; Polyclonal Antibody; Presenilin 1 Antibody; AD3; Ad3h; FAD; Homo Sapiens Clone CC44 Senilin 1; Presenilin-1 CTF12; Protein S182; PS 1; PS-1; PS1-CTF12; PSEN1; PSN1_HUMAN; PSNL1; S182; anti-PSEN1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	Presenilin 1 antibody detects endogenous levels of total Presenilin 1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	467
Applicable Applications for anti-PSEN1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Presenilin 1
Subcellular Location	Endoplasmic Reticulum Membrane. Golgi Apparatus Membrane. Cell Surface. Bound to NOTCH1 also at the cell surface. Colocalizes with CDH1/2 at sites of cell-cell contact. Colocalizes with CTNNB1 in the endoplasmic reticulum and the proximity of the plasma membrane. Also present in azurophil granules of neutrophils.
Tissue Specificity	Detected in azurophile granules in neutrophils and in platelet cytoplasmic granules (at protein level) (PubMed:11987239). Expressed in a wide range of tissues including various regions of the brain, liver, spleen and lymph nodes (PubMed:7596406, PubMed:8641442, PubMed:8574969).
Predicted Cross Reactivity	Horse, Rabbit, Chicken, Xenopus
Similarity	Horse (89%), Rabbit (89%), Chicken (100%), Xenopus (88%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)

Western blot analysis on RAW264.7 cell lysate using Presenilin 1 Antibody, The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)

AAA320886 staining RAW264.7 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



IHC (Immunohistochemistry)

AAA320886 at 1/100 staining human testis tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-PSEN1 antibody	Description: PSEN1 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 (beta-amyloid 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. Regulates epithelial-cadherin function. Function: 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) (PubMed:15274632, PubMed:10545183, PubMed:10593990, PubMed:10206644, PubMed:10899933, PubMed:10811883, PubMed:12679784, PubMed:12740439, PubMed:25043039, PubMed:26280335). Requires the presence of the other members of the gamma-secretase complex for protease activity (PubMed:15274632, PubMed:25043039, PubMed:26280335). Plays a role in Notch and Wnt signaling cascades and regulation of downstream processes via its role in processing key regulatory proteins, and by regulating cytosolic CTNNB1 levels (PubMed:9738936, PubMed:10593990, PubMed:10899933, PubMed:10811883). Stimulates cell-cell adhesion via its interaction with CDH1; this stabilizes the complexes between CDH1 (E-cadherin) and its interaction partners CTNNB1 (beta-catenin), CTNND1 and JUP (gamma-catenin) (PubMed:11953314). Under conditions of apoptosis or calcium influx, cleaves CDH1 (PubMed:11953314). This promotes the disassembly of the complexes between CDH1 and CTNND1, JUP and CTNNB1, increases the pool of cytoplasmic CTNNB1, and thereby negatively regulates Wnt signaling (PubMed:9738936, PubMed:11953314). Required for normal embryonic brain and skeleton development, and for normal angiogenesis (By similarity). Subunit Structure: Homodimer. The functional gamma-secretase complex is composed of at least four polypeptides: a presenilin homodimer (PSEN1 or PSEN2), nicastrin (NCSTN), APH1 (APH1A or APH1B) and PEN2 (PubMed:15274632, PubMed:12679784, PubMed:12740439, PubMed:25043039, PubMed:26280335). Such minimal complex is sufficient for secretase activity (PubMed:15274632, PubMed:12679784, PubMed:12740439, PubMed:25043039, PubMed:26280335). Other components which are associated with the complex include SLC25A64, SLC5A7, PHB and PSEN1 isoform 3. Predominantly heterodimer of a N-terminal (NTF) and a C-terminal (CTF) endoproteolytical fragment (PubMed:15274632). Associates with proteolytic processed C-terminal fragments C83 and C99 of the amyloid precursor protein (APP). Associates with NOTCH1 (PubMed:10593990). Associates with cadherin/catenin adhesion complexes through direct binding to CDH1 or CDH2 (PubMed:11953314, PubMed:14515347, PubMed:16126725). Interaction with CDH1 stabilizes the complex and stimulates cell-cell aggregation (PubMed:11953314). Interaction with CDH2 is essential for trafficking of CDH2 from the endoplasmic reticulum to the plasma membrane (PubMed:14515347). Interacts with CTNND2, CTNNB1, CTNND1, JUP, HERPUD1, FLNA, FLNB, MTCH1, PKP4 and PARL (PubMed:9738936, PubMed:9437013, PubMed:10551805, PubMed:10037471, PubMed:11953314, PubMed:11799129, PubMed:16126725). Interacts through its N-terminus with isoform 3 of GFAP (PubMed:12058025). Interacts with DOCK3 (By similarity). Interacts with isoform 1 and isoform 3 of UBQLN1 (PubMed:21143716). Post-translational Modifications: Heterogeneous proteolytic processing generates N-terminal (NTF) and C-terminal (CTF) fragments of approximately 35 and 20 kDa, respectively. During apoptosis, the C-terminal fragment (CTF) is further cleaved by caspase-3 to produce the fragment, PS1-CTF12. After endoproteolysis, the C-terminal fragment (CTF) is phosphorylated on serine residues by PKA and/or PKC. Phosphorylation on Ser-346 inhibits endoproteolysis. Similarity: The PAL motif is required for normal active site conformation. Belongs to the peptidase A22A family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4506163
NCBI GeneID	5663
NCBI Accession #	NP_000012.1
NCBI GenBank Nucleotide #	NM_000021.3
UniProt Accession #	P49768; O95465; Q14762; Q15719; Q15720; Q96P33; Q9UIF0; B2R6D3
Molecular Weight	Observed: 60 kDa Predicted: 53 kDa
NCBI Official Full Name	presenilin-1 isoform I-467
NCBI Official Synonym Full Names	presenilin 1
NCBI Official Symbol	PSEN1

NCBI Official Synonym Symbols	AD3; FAD; PS1; PS-1; S182; ACNINV3
NCBI Protein Information	presenilin-1
UniProt Protein Name	Presenilin-1
UniProt Gene Name	PSEN1
UniProt Synonym Gene Names	AD3; PS1; PSNL1; PS-1; PS1-CTF12

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/presenilin-1-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/320886>