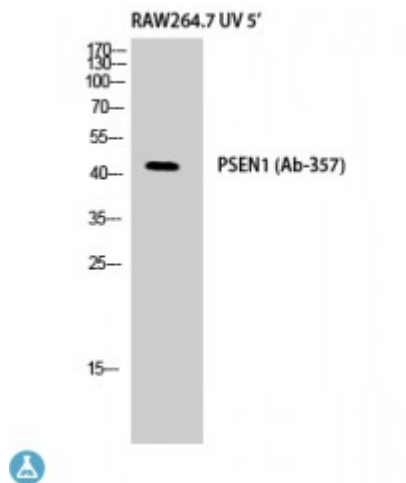


Anti-Presenilin 1 antibody



Description	Rabbit polyclonal to Presenilin 1.
Model	STJ95221
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human Presenilin 1 around the non-phosphorylation site of S357.
Immunogen Region	300-380 aa
Gene ID	5663
Gene Symbol	PSEN1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:5000
Specificity	Presenilin 1 Polyclonal Antibody detects endogenous levels of Presenilin 1 protein.
Tissue Specificity	Detected in azurophile granules in neutrophils and in platelet cytoplasmic granules (at protein level) . Expressed in a wide range of tissues including various regions of the brain, liver, spleen and lymph nodes .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Presenilin-1 PS-1 Protein S182 Presenilin-1 NTF subunit Presenilin-1 CTF subunit Presenilin-1 CTF12 PS1-CTF12

Molecular Weight	43 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:9508OMIM:104311
Alternative Names	Presenilin-1 PS-1 Protein S182 Presenilin-1 NTF subunit Presenilin-1 CTF subunit Presenilin-1 CTF12 PS1-CTF12
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 (beta-amyloid precursor protein) . Requires the presence of the other members of the gamma-secretase complex for protease activity . 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 . 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) . Under conditions of apoptosis or calcium influx, cleaves CDH1 . 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 . Required for normal embryonic brain and skeleton development, and for normal angiogenesis .
Sequence and Domain Family	The PAL motif is required for normal active site conformation.
Cellular Localization	Endoplasmic reticulum membrane Golgi apparatus membrane Cytoplasmic granule Cell membrane. Translocates with bound NOTCH1 from the endoplasmic reticulum and/or Golgi to 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 . Colocalizes with UBQLN1 in the cell membrane and in cytoplasmic juxtanuclear structures called aggresomes .
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.