

## Summary

Production Name	Presenilin 2 (phospho Ser330) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,ELISA
Reactivity	Human,Mouse,Rat

## Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

## Immunogen

Gene Name	PSEN2
Alternative Names	PSEN2; AD4; PS2; PSNL2; STM2; Presenilin-2; PS-2; AD3LP; AD5; E5-1; STM-2
Gene ID	5664.0
SwissProt ID	P49810.The antiserum was produced against synthesized peptide derived from human
	Presenilin 2 around the phosphorylation site of Ser330. AA range:296-345

# Application

Dilution Ratio	IHC 1:100 - 1:300. ELISA: 1:5000
Molecular Weight	50kD



### Background

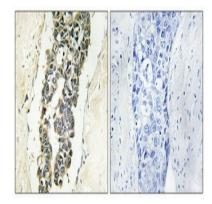
Alzheimer's disease (AD) patients with an inherited form of the disease carry mutations in the presenilin proteins (PSEN1 or PSEN2) or the amyloid precursor protein (APP). These disease-linked mutations result in increased production of the longer form of amyloid-beta (main component of amyloid deposits found in AD brains). Presenilins are postulated to regulate APP processing through their effects on gamma-secretase, an enzyme that cleaves APP. Also, it is thought that the presenilins are involved in the cleavage of the Notch receptor such that, they either directly regulate gamma-secretase activity, or themselves act are protease enzymes. Two alternatively spliced transcript variants encoding different isoforms of PSEN2 have been identified. [provided by RefSeq, Jul 2008], disease: Defects in PSEN2 are the cause of Alzheimer disease type 4 (AD4) [MIM:606889]. AD is an autosomal dominant Alzheimer disease. Alzheimer disease is a neurodegenerative disorder characterized by progressive dementia, loss of cognitive abilities, and deposition of fibrillar amyloid proteins as intraneuronal neurofibrillary tangles, extracellular amyloid plagues and vascular amyloid deposits. The major constituent of these plaques is the neurotoxic amyloid-beta-APP 40-42 peptide (s), derived proteolytically from the transmembrane precursor protein APP by sequential secretase processing. The cytotoxic C-terminal fragments (CTFs) and the caspasecleaved products such as C31 derived from APP, are also implicated in neuronal death., disease: Three causative genes have been identified that when mutated lead to presenile Alzheimer disease: APP (amyloid precursor protein gene), PSEN1 and PSEN2. These three genes account for half of the families with autosomal dominant presenile AD, which represent approximately 10% of the whole AD population. In addition, apolipoprotein E has been identified as a risk-modifying locus..domain:The PAL motif is required for normal active site conformation..function: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 gammasecretase complex to have a protease activity. May play a role in intracellular signaling and gene expression or in linking chromatin to the nuclear membrane. May function in the cytoplasmic partitioning of proteins.,online information: Presenilins mutations, PTM: Heterogeneous proteolytic processing generates N-terminal and C-terminal fragments.,PTM:Phosphorylated on serine residues.,similarity:Belongs to the peptidase A22A family.,subunit:Interacts with DOCK3 (By similarity). Homodimer. Component of the gamma-secretase complex, a complex composed of a presenilin homodimer (PSEN1 or PSEN2), nicastrin (NCSTN), APH1 (APH1A or APH1B) and PEN2. Such minimal complex is sufficient for secretase activity, although other components may exist. Interacts with HERPUD1, FLNA, FLNB and PARL, tissue specificity: Isoform 1 is seen in the placenta, skeletal muscle and heart while isoform 2 is seen in the heart, brain, placenta, liver, skeletal muscle and kidney.,

### **Research Area**

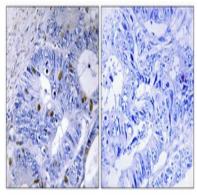
Notch; Alzheimer's disease;

## Image Data

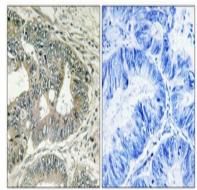




Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4°, overnight) . High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Immunohistochemical analysis of paraffin-embedded Human colon cancer. Antibody was diluted at 1:100 (4°, overnight) . High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Immunohistochemical analysis of paraffin-embedded Human colon cancer. Antibody was diluted at 1:100 (4°, overnight) . High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



**Note** For research use only.