

Presenilin 1 (phospho Ser357) Polyclonal Antibody

Catalog No: YP0831

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: Presenilin 1

Fields: >>Wnt signaling pathway;>>Notch signaling pathway;>>Neurotrophin signaling

pathway;>>Alzheimer disease;>>Pathways of neurodegeneration - multiple

diseases;>>Human papillomavirus infection

Gene Name: PSEN1

Protein Name: Presenilin-1

P49768

P49769

Human Gene Id: 5663

Human Swiss Prot

No:

Mouse Gene ld: 19164

Mouse Swiss Prot

No:

Rat Gene ld: 29192

Rat Swiss Prot No: P97887

Immunogen: The antiserum was produced against synthesized peptide derived from human

PSEN1 around the phosphorylation site of Ser357. AA range:323-372

Specificity: Phospho-Presenilin 1 (S357) Polyclonal Antibody detects endogenous levels of

Presenilin 1 protein only when phosphorylated at S357.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, lgG

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Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 43kD

Cell Pathway: WNT;WNT-T CELLNotch;Neurotrophin;Alzheimer's disease;

Background : Alzheimer's disease (AD) patients with an inherited form of the disease

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). Presentilins are postulated to regulate APP processing through their effects on gamma-secretase, an enzyme that cleaves

carry mutations in the presentlin proteins (PSEN1; PSEN2) or in the amyloid

APP. Also, it is thought that the presentilins are involved in the cleavage of the Notch receptor, such that they either directly regulate gamma-secretase activity or themselves are protease enzymes. Several alternatively spliced transcript variants encoding different isoforms have been identified for this gene, the full-

length nature of only some have been determined. [provided by RefSeq, Aug

2008].

Function : disease:Defects in PSEN1 are a cause of Alzheimer disease type 3 (AD3)

[MIM:607822]. AD3 is a familial early-onset form of 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 plaques 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 caspase-cleaved products such

as C31 derived from APP, are also implicated in neuronal death., disease: Defects in PSEN1 are a cause of frontotemporal dementia [MIM:600274]...domain: The

PAL motif is required for normal active site conformation.,fun

Subcellular Location:

Endoplasmic reticulum . Endoplasmic reticulum membrane ; Multi-pass membrane protein . Golgi apparatus membrane ; Multi-pass membrane protein . Cytoplasmic granule . Cell membrane ; Multi-pass membrane protein . Cell projection, growth cone . Early endosome . Early endosome membrane ; Multi-pass membrane protein . Cell projection, neuron projection . Cell projection, axon . Cell junction, synapse . Translocates with bound NOTCH1 from the

endoplasmic reticulum and/or Golgi to the cell surface (PubMed:10593990). Colocalizes with CDH1/2 at sites of cell-cell contact, Colocalizes with CTNNB1 in

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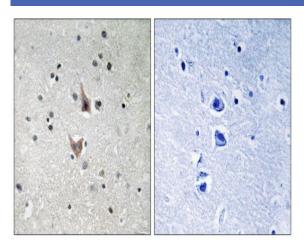


the endoplasmic reticulum and the proximity of the plasma membrane (PubMed:9738936). Also present in azurophil granules of neutrophils (PubMed:11987239). Colocalizes with UBQLN1 in the cell membrane and

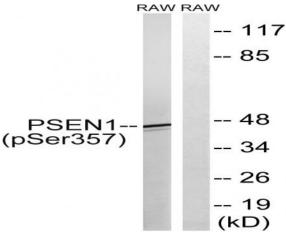
Expression:

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).

Products Images



Immunohistochemistry analysis of paraffin-embedded human brain, using PSEN1 (Phospho-Ser357) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from RAW264.7 cells treated with UV 5', using PSEN1 (Phospho-Ser357) Antibody. The lane on the right is blocked with the phospho peptide.