

# 早老素蛋白-2 抗体

产品货号: mlR3815

英文名称: presenilin 2

中文名称: 早老素蛋白-2 抗体

别 名: AD 3L; AD 3LP; AD 4; AD 5; AD3L; AD3LP; AD4; AD5; Alzheimer disease 4; Alzheimer disease familial

type 4; E5 1; Presenilin2; Presenilin 2; Presenilin 2; PS 2; PSEN 2; PSNL 2; PSNL 2; STM 2; STM2.

研究领域: 细胞生物 免疫学 神经生物学

抗体来源: Rabbit

克隆类型: Polyclonal

交叉反应 : Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,

产品应用: ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 (石蜡切片需做抗原修复)

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分子量: 45-50kDa

细胞定位: 细胞浆 细胞膜

性 状: Lyophilized or Liquid

浓 度: 1mg/ml

免疫原: KLH conjugated synthetic peptide derived from human presenilin 2/PS-2:811-180/448

亚 型: IgG



纯化方法: affinity purified by Protein A

储存液: 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件: Store at -20  $^{\circ}$  C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 $^{\circ}$  C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4  $^{\circ}$  C.

PubMed: PubMed

产品介绍: Alzheimer's disease (AD) patients with an inherited form of the disease carry mutations in the presenilin proteins (PSEN1; 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 are protease enzymes. Two alternative transcripts of PSEN2 have been identified.

## **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 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. May function in the cytoplasmic partitioning of proteins.

## 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.



#### **Subcellular Location:**

Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein.

## **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.

#### Post-translational modifications:

Heterogeneous proteolytic processing generates N-terminal and C-terminal fragments.

Phosphorylated on serine residues.

## **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 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.

Defects in PSEN2 are the cause of cardiomyopathy dilated type 1V (CMD1V) [MIM:613697]. It is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.

## Similarity:

Belongs to the peptidase A22A family.



SWISS:	
P49810	
Gene ID:	
5664	
Important Note:	

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.