



Rabbit Anti-CLACP antibody

SL11643R

Product Name:	CLACP
Chinese Name:	阿尔茨海默病淀粉样蛋白相关Collagen protein抗体
Alias:	Alzheimer disease amyloid associated protein; AMY; CLAC; CLAC P; CLAC precursor; COL25A1; COL25A1 protein; Collagen alpha 1 XXV chain; Collagen alpha 1(XXV) chain; Collagen like Alzheimer amyloid plaque component; Collagen like Alzheimer amyloid plaque component precursor; Collagen type XXV alpha 1; Collagenous Alzheimer amyloid plaque component.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	65kDa
Cellular localization:	The cell membraneSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CLACP:581-654/654<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °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°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 °C.
PubMed:	PubMed
Product Detail:	Collagen proteins (products of the COL gene family) are fibrous, extracellular matrix proteins with high tensile strength and are the major components of connective tissue

such as tendons and cartilage. All collagens contain a triple helix domain and frequently show lateral self-association in order to form complex connective tissues. The Collagen Type XXV precursor produces the proteolytic fragment CLAC (collagenous Alzheimer amyloid plaque component), which deposits in senile plaques associated with amyloid beta peptides (Abeta) in the brains of patients with Alzheimer's disease. CLAC binds to the fibrillized form of Abeta, which disturbs the structure and function of plasma membranes.

Function:

Antibodies against senile plaque (SP) amyloid obtained a clone 9D2, which labeled amyloid fibrils in SPs and reacted with approximately 50/100 kDa polypeptides in Alzheimer's diseased (AD) brains. The 9D2 antigen was identified as CLAC (collagen like Alzheimer amyloid plaque component), and its precursor as CLACP/collagen type XXV. Both secreted and membrane tethered forms of CLACP/collagen type XXV specifically bound to fibrillized Abeta, implicating these proteins in beta amyloidogenesis and neuronal degeneration in AD.

Subunit:

o assemble amyloid fibrils into protease-resistant aggregates. Binds heparin. [SUBUNIT] Forms homodimers and homotrimers. Binds to the fibrillized forms of beta amyloid peptide 40 (beta-APP40) and beta amyloid peptide 42 (beta-APP42). Found associated with beta-APP42 more frequently than with beta-APP40.

Subcellular Location:

Membrane; Single-pass type II membrane protein (Potential). Note=After proteolytic cleavage, CLAC is secreted.

Tissue Specificity:

Expressed predominantly in brain. Deposited preferentially in primitive or neuritic amyloid plaques which are typical of Alzheimer disease.

Post-translational modifications:

Undergoes proteolytic cleavage by furin protease to yield the soluble collagen-like Alzheimer amyloid plaque component.

Glycosylated.

Hydroxylated on 11% of proline residues and 49% of lysine residues.

Similarity:

Contains 7 collagen-like domains.

SWISS:

Q9BXS0

Gene ID:

84570

Database links:

[Entrez Gene: 84570](#) Human

[Entrez Gene: 77018](#) Mouse

[Entrez Gene: 687064](#) Rat

[Omim: 610004](#) Human

[SwissProt: Q9BXS0](#) Human

[SwissProt: Q99MQ5](#) Mouse

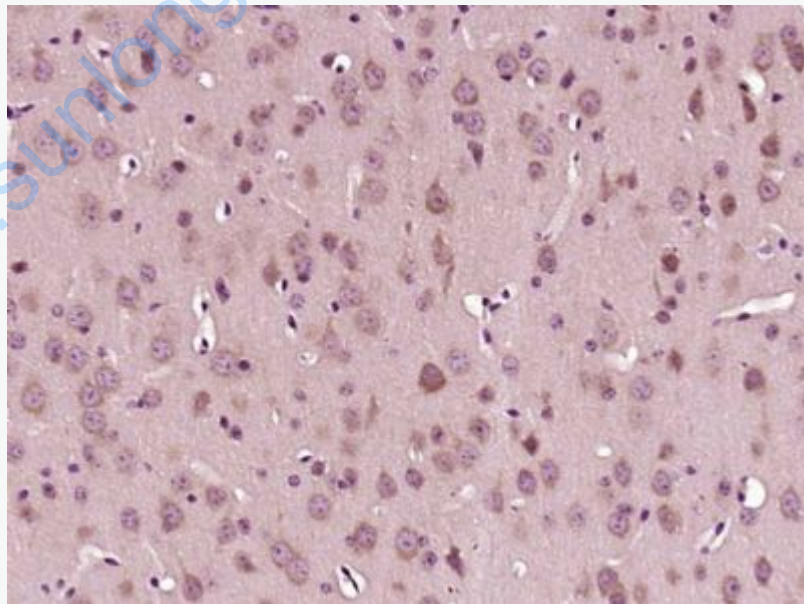
[Unigene: 658842](#) Human

[Unigene: 91728](#) Mouse

Important Note:

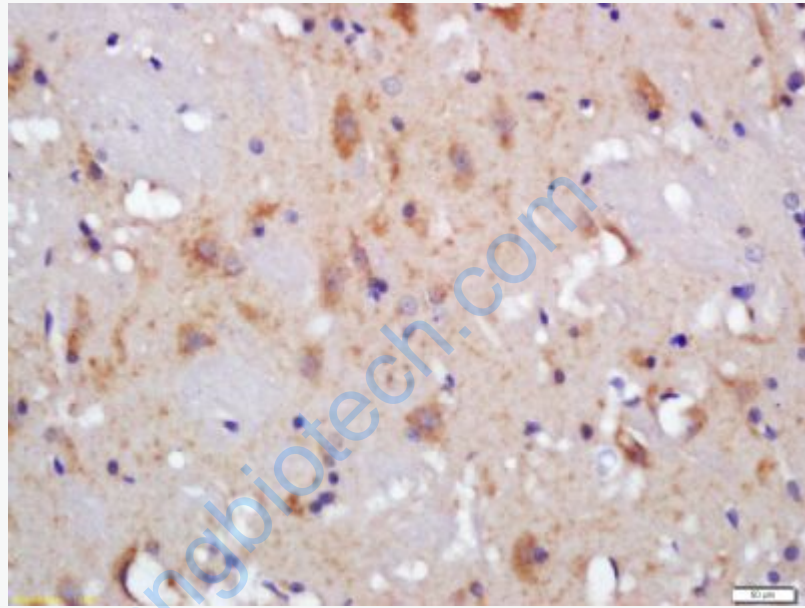
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Picture:



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C

for 30min; Antibody incubation with (CLACP) Polyclonal Antibody, Unconjugated (SL11643R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-CLACP Polyclonal Antibody, Unconjugated(SL11643R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining