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CLACP Rabbit pAb

Catalog # AP99221

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9BXS0
Other Accession	Q9BXS0
Reactivity	Rat, Mouse
Predicted	Human, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64771
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CLACP
Epitope Specificity	581-654/654
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 7 collagen-like domains.
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.
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	84570
Other Names	AMY; CFEOM5; CLAC; CLAC-P; CLACP; 2700062B08Rik; COPA1_HUMAN; COL25A1; Alzheimer disease amyloid-associated protein (AMY); COPA1_MOUSE; collagen type XXV alpha 1 chain; collagen, type XXV, alpha 1

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	COL25A1 (HGNC:18603)
Function	Inhibits fibrillization of amyloid-beta peptide during the elongation phase. Has also been shown to assemble amyloid fibrils into protease-resistant aggregates. Binds heparin.
Cellular Location	Membrane; Single-pass type II membrane protein. Note=After proteolytic cleavage, CLAC is secreted
Tissue Location	Expressed predominantly in brain. Deposited preferentially in primitive or neuritic amyloid plaques which are typical of Alzheimer disease.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.