

Product name:	COL25A1 Rabbit Polyclonal Antibody
Cat number:	ABN09182
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthetic peptide from human protein at AA range: 101-150
Reactivity:	Human, Mouse
Applications:	WB 1:500-1:2000, ELISA 1:10000-1:20000
Molecular Weight:	64kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a brain-specific membrane associated collagen. A product of proteolytic processing of the encoded protein, CLAC (collagenous Alzheimer amyloid plaque component), binds to amyloid beta-peptides found in Alzheimer amyloid plaques but CLAC inhibits rather than facilitates amyloid fibril elongation (PMID: 16300410). A study of over-expression of this collagen in mice, however, found changes in pathology and behavior suggesting that the encoded protein may promote amyloid plaque formation (PMID: 19548013). Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011],caution:The pyrrolidone carboxylic acid reported in PubMed:11927537 probably formed artifactually from Glu-113 during the extraction procedure in 70% formic acid. In PubMed:15522881, the protein was found to have unblocked Glu at the N-terminus.,function:Inhibits fibrillization of beta amyloid peptide during the elongation phase. Has also been shown to assemble amyloid fibrils into protease-resistant aggregates. Binds heparin.,PTM:Glycosylated.,PTM:Hydroxylated on 11% of proline residues and 49% of lysine residues.,PTM:Undergoes proteolytic cleavage by furin protease to yield the soluble collagen-like Alzheimer amyloid plaque component.,similarity:Contains 7 collagen-like domains.,subcellular location:After proteolytic cleavage, CLAC is secreted.,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.,tissue specificity:Expressed predominantly in brain. Deposited preferentially in primitive or neuritic amyloid plaques which are typical of Alzheimer's disease.,