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**Product Name: COL25A1 Rabbit Polyclonal Antibody****Catalog #: APRab09181**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
<b>Molecular Weight</b>	64kDa

**Antigen Information**

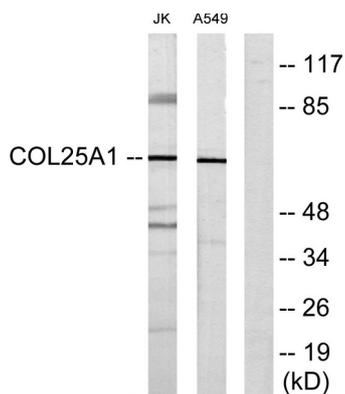
<b>Gene Name</b>	COL25A1
<b>Alternative Names</b>	COL25A1; Collagen alpha-1(XXV) chain; Alzheimer disease amyloid-associated protein; AMY; CLAC-P
<b>Gene ID</b>	84570.0
<b>SwissProt ID</b>	Q9BXS0
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Collagen XXV alpha1. AA range:101-150

**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.,

## Research Area

### Image Data



Western blot analysis of lysates from Jurkat and A549 cells, using Collagen XXV alpha1 Antibody. The lane on the right is blocked with the synthesized peptide.