Product Name: COL25A1 Rabbit Polyclonal Antibody
Catalog #: APRab09181

Summary

Production Name	COL25A1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

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

Application

Dilution Ratio	WB 1:500-1:2000. ELISA: 1:20000.
Molecular Weight	64kD

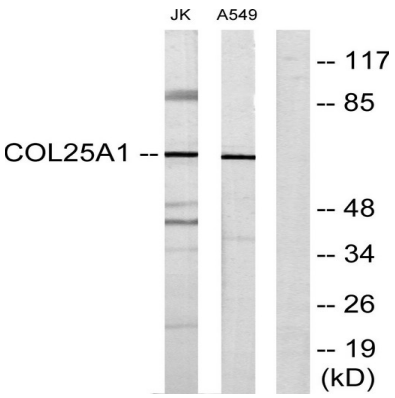
Background

Product Name: COL25A1 Rabbit Polyclonal Antibody
Catalog #: APRab09181

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.

Note

For research use only.