
Summary

Production Name	COL4A6 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF,IHC,WB,ELISA
Reactivity	Human,Rat,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	COL4A6
Alternative Names	COL4A6; Collagen alpha-6(IV) chain
Gene ID	1288.0
SwissProt ID	Q14031.The antiserum was produced against synthesized peptide derived from human Collagen IV alpha6. AA range:1201-1250

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. Not yet tested in other applications.
Molecular Weight	160kD

Background

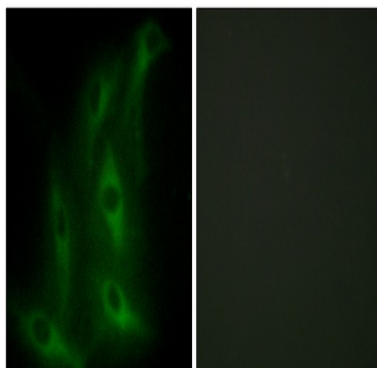
This gene encodes one of the six subunits of type IV collagen, the major structural component of basement membranes. Like the other members of the type IV collagen gene family, this gene is organized in a head-to-head conformation with another type IV collagen gene, alpha 5 type IV collagen, so that the gene pair shares a common promoter. Deletions in the alpha 5 gene that extend into the alpha 6 gene result in diffuse leiomyomatosis accompanying the X-linked Alport syndrome caused by the deletion in the alpha 5 gene. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2013],disease:Deletions covering the N-terminal regions of COL4A6 and COL4A5, which are localized in a head-to-head manner, are the cause of diffuse leiomyomatosis with Alport syndrome (DL-ATS) [MIM:308940]; also known as esophageal and vulval leiomyomatosis with nephropathy or Alport syndrome and diffuse leiomyomatosis (ATS-DL). DL-ATS is the combination of Alport syndrome (AS) and diffuse leiomyomatosis (DL). AS is characterized by progressive glomerulonephritis, often associated with high-tone sensorineural deafness, specific eye abnormalities (lenticonous and macular flecks), and glomerular basement membrane defects. DL is a tumorous process involving smooth muscle cells, mostly of the esophagus, but also of the tracheobronchial tree and the female genital tract.,domain:Alpha chains of type IV collagen have a non-collagenous domain (NC1) at their C-terminus, frequent interruptions of the G-X-Y repeats in the long central triple-helical domain (which may cause flexibility in the triple helix), and a short N-terminal triple-helical 7S domain.,function:Type IV collagen is the major structural component of glomerular basement membranes (GBM), forming a 'chicken-wire' meshwork together with laminins, proteoglycans and entactin/nidogen.,PTM:Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.,PTM:Type IV collagens contain numerous cysteine residues which are involved in inter- and intramolecular disulfide bonding. 12 of these, located in the NC1 domain, are conserved in all known type IV collagens.,similarity:Belongs to the type IV collagen family.,similarity:Contains 1 collagen IV NC1 (C-terminal non-collagenous) domain.,subunit:There are six type IV collagen isoforms, alpha 1(IV)-alpha 6(IV), each of which can form a triple helix structure with 2 other chains to generate type IV collagen network.,

Research Area

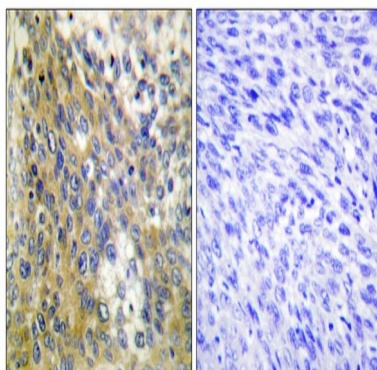
Focal adhesion;ECM-receptor interaction;Pathways in cancer;Small cell lung cancer;

Image Data

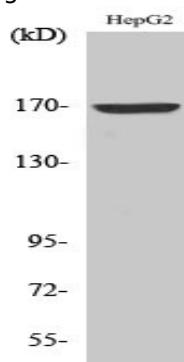
Product Name: COL4A6 Rabbit Polyclonal Antibody
Catalog #: APRab09190



Immunofluorescence analysis of HeLa cells, using Collagen IV alpha6 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human cervix carcinoma tissue, using Collagen IV alpha6 Antibody. The picture on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using COL4A6 Polyclonal Antibody diluted at 1 : 500

Note

For research use only.