


Anti-Collagen IV antibody ab6586

★★★★★ [120 Abreviews](#) [820 References](#) [5 图像](#)

概述

产品名称	Anti-Collagen IV抗体
描述	兔多克隆抗体to Collagen IV
宿主	Rabbit
特异性	ab6586 is designed to bind specifically to NATIVE collagen epitopes composed of multiple subunit strands. Negligible cross-reactivity with Type I, II, III, V or VI collagens. Non-specific cross reaction of anti-collagen antibodies with other human serum proteins or non-collagen extracellular matrix proteins is negligible.
经测试应用	适用于: ELISA, IHC-Fr, WB, IHC-P, IP, ICC/IF, IHC-FrFI, IHC-FoFr
种属反应性	与反应: Mouse, Rat, Hamster, Cow, Dog, Human, Pig, Zebrafish, African green monkey, Chinese hamster, Syrian hamster 预测可用于: Mammals 
免疫原	Full length native protein (purified) corresponding to Collagen IV. Collagen Type IV from human and bovine placenta. The immunogen maintains the native conformation of the protein.
阳性对照	IHC-P: Human kidney, liver, lung, renal oncocytoma and skeletal muscle tissues.
常规说明	There are other recombinant monoclonal options, such as Recombinant Anti-Collagen IV antibody ab214417 . Abcam recommended secondaries - Goat Anti-Rabbit HRP (ab205718) and Goat Anti-Rabbit Alexa Fluor® 488 (ab150077). Or search our wide range of secondary antibodies for use with your experiment. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

	term. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.01% Sodium azide Constituents: 0.8766% Sodium chloride, 0.424% Potassium phosphate
纯度	Immunogen affinity purified
纯化说明	Immunoaffinity chromatography using immobilized antigens followed by extensive cross-adsorption against other collagens, human serum proteins and non-collagen extracellular matrix proteins to remove any unwanted specificities.
Primary antibody说明	This antibody is well suited to detect extracellular matrix proteins in normal as well as disease state tissues. Disruption of tissue organization is the hallmark of neoplasia. Malignant lesions can be distinguished from benign by examining the breakdown of basement membranes and loss of 3-dimensional architecture. Malignant cells are presumed to use matrix metalloproteases to degrade barriers created by the extracellular matrix which then allows metastasis to occur. Collagenases, stomelysins and gelatinases can collectively degrade all of the various components of the extracellular matrix, including fibrillar and non-fibrillar collagens and basement membrane glycoproteins.
克隆	多克隆
同种型	IgG

应用

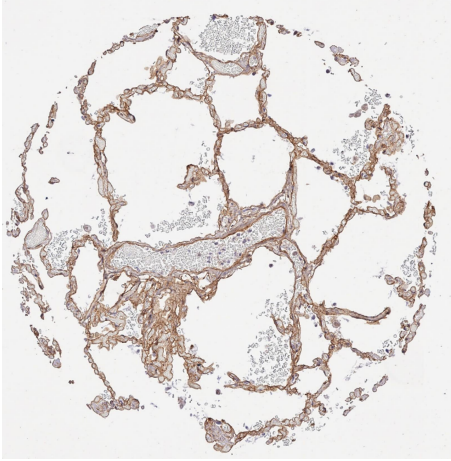
The Abpromise guarantee **Abpromise™**承诺保证使用ab6586于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ELISA		Use at an assay dependent concentration.
IHC-Fr	★★★★★ (21)	Use at an assay dependent concentration.
WB	★★★★★ (26)	Use at an assay dependent concentration. Predicted molecular weight: 161 kDa. This product is not recommended for use under denaturing conditions in WB, IP, and ELISA. We would suggest testing it under native conditions.
IHC-P	★★★★★ (36)	1/15 - 1/400. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IP	★★★★★ (3)	Use at an assay dependent concentration.
ICC/IF	★★★★★ (23)	Use at an assay dependent concentration. PubMed: 19933193
IF		Use at an assay dependent concentration.
IHC-FrFI	★★★★★ (1)	Use at an assay dependent concentration.
IHC-FoFr	★★★★★ (8)	Use at an assay dependent concentration.

功能	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. Arresten, comprising the C-terminal NC1 domain, inhibits angiogenesis and tumor formation. The C-terminal half is found to possess the anti-angiogenic activity. Specifically inhibits endothelial cell proliferation, migration and tube formation. Inhibits expression of hypoxia-inducible factor 1alpha and ERK1/2 and p38 MAPK activation. Ligand for alpha1/beta1 integrin.
组织特异性	Highly expressed in placenta.
疾病相关	Defects in COL4A1 are a cause of brain small vessel disease with hemorrhage (BSVDH) [MIM:607595]. Brain small vessel diseases underlie 20 to 30 percent of ischemic strokes and a larger proportion of intracerebral hemorrhages. Inheritance is autosomal dominant. Defects in COL4A1 are the cause of hereditary angiopathy with nephropathy aneurysms and muscle cramps (HANAC) [MIM:611773]. The clinical renal manifestations include hematuria and bilateral large cysts. Histologic analysis revealed complex basement membrane defects in kidney and skin. The systemic angiopathy appears to affect both small vessels and large arteries. Defects in COL4A1 are a cause of porencephaly familial (PCEPH) [MIM:175780]. Porencephaly is a term used for any cavitation or cerebrospinal fluid-filled cyst in the brain. Porencephaly type 1 is usually unilateral and results from focal destructive lesions such as fetal vascular occlusion or birth trauma. Type 2, or schizencephalic porencephaly, is usually symmetric and represents a primary defect or arrest in the development of the cerebral ventricles.
序列相似性	Belongs to the type IV collagen family. Contains 1 collagen IV NC1 (C-terminal non-collagenous) domain.
结构域	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.
翻译后修饰	Lysines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in all cases and bind carbohydrates. Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains. 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. The trimeric structure of the NC1 domains is stabilized by covalent bonds between Lys and Met residues. Proteolytic processing produces the C-terminal NC1 peptide, arresten.
细胞定位	Secreted > extracellular space > extracellular matrix > basement membrane.

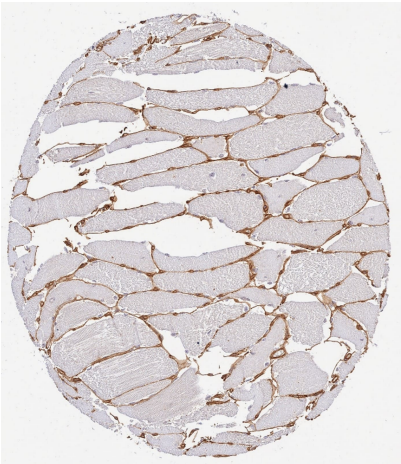
图片



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Collagen IV antibody (ab6586)

Immunohistochemical analysis formalin-fixed paraffin-embedded human lung tissue labelling Collagen IV with ab6586 at 1/15 dilution for 1 hour at 37 °C followed by a ready to use Polymer-HRP, Rabbit/Mouse Detection Kit. Blocking: Peroxidase-Blocking Solution for 10 minutes. Substrate: DAB-Chromogen, Rabbit/Mouse. Staining/Results: basement membranes and vessels. Counterstained with hematoxylin for 15 seconds.

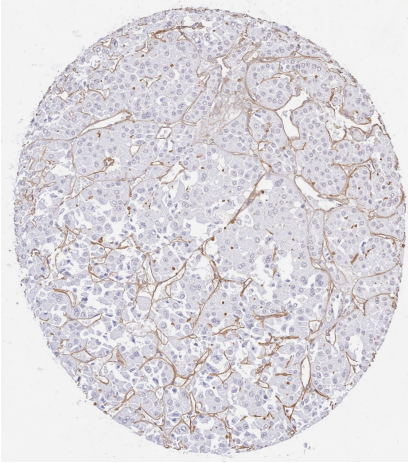
Heat induced epitope retrieval (HIER) using Tris-EDTA-citrate buffer pH 7.8 for 5 minutes.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Collagen IV antibody (ab6586)

Immunohistochemical analysis of formalin-fixed paraffin-embedded human skeletal muscle cells labelling Collagen IV with ab6586 at 1/15 dilution for 1 hour at 37 °C followed by a ready to use Polymer-HRP, Rabbit/Mouse Detection Kit. Blocking: Peroxidase-Blocking Solution for 10 minutes. Substrate: DAB-Chromogen, Rabbit/Mouse. Staining/Results: cells surrounded by collagen IV fibers. Counterstained with hematoxylin for 15 seconds.

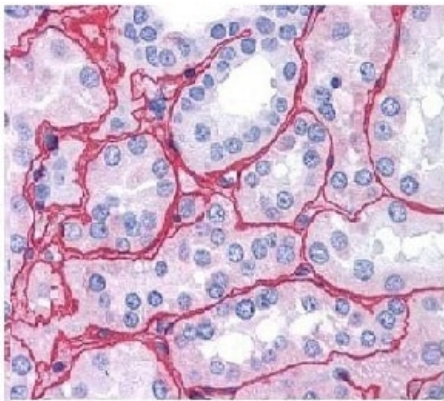
Heat induced epitope retrieval (HIER) using Tris-EDTA-citrate buffer pH 7.8 for 5 minutes.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Collagen IV antibody (ab6586)

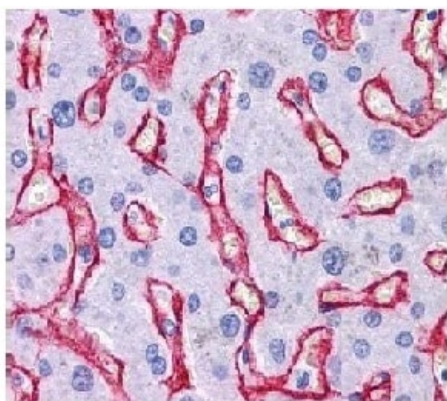
Immunohistochemical analysis of formalin-fixed paraffin-embedded human renal oncocytoma tissue labelling Collagen IV with ab6586 at 1/15 dilution for 1 hour at 37 °C followed by a ready to use Polymer-HRP, Rabbit/Mouse Detection Kit. Blocking: Peroxidase-Blocking Solution for 10 minutes. Substrate: DAB-Chromogen, Rabbit/Mouse. Staining/Results: dense collagen IV positive membranes surrounding tumor cell nests. Counterstained with hematoxylin for 15 seconds

Heat induced epitope retrieval (HIER) using Tris-EDTA-citrate buffer pH 7.8 for 5 minutes.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Collagen IV antibody (ab6586)

Paraffin-embedded human kidney tissue stained for Collagen IV using ab6586 at 1/400 dilution in immunohistochemical analysis with strong staining observed in glomeruli.



Paraffin-embedded human liver tissue stained for Collagen IV using ab6586 at 1/400 dilution in immunohistochemical analysis, strong staining was observed in the sinusoids.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Collagen IV antibody (ab6586)

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