


Anti-Collagen IV antibody ab6586

★★★★★ [120 Abreviews](#) [820 References](#) [画像数 5](#)

製品の概要

製品名	Anti-Collagen IV antibody
製品の詳細	Rabbit polyclonal to Collagen IV
由来種	Rabbit
特異性	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.
アプリケーション	適用あり: ELISA, IHC-Fr, WB, IHC-P, IP, ICC/IF, IHC-FrFI, IHC-FoFr
種交差性	交差種: Mouse, Rat, Hamster, Cow, Dog, Human, Pig, Zebrafish, African green monkey, Chinese hamster, Syrian hamster 交差が予測される動物種: 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.
ポジティブ・コントロール	IHC-P: Human kidney, liver, lung, renal oncocytoma and skeletal muscle tissues.
特記事項	

There are other recombinant monoclonal options, such as [Recombinant Anti-Collagen IV antibody](#).

Abcam recommended secondaries - Goat Anti-Rabbit HRP ([ab205718](#)) and Goat Anti-Rabbit Alexa Fluor® 488 ([ab150077](#)).

See other [anti-rabbit secondary antibodies](#) that can be used with this antibody.

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

製品の特性

製品の状態	Liquid
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保存方法	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.
バッファー	Preservative: 0.01% Sodium azide Constituents: 0.8766% Sodium chloride, 0.424% Potassium phosphate
精製度	Immunogen affinity purified
特記事項 (精製)	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.
一次抗体 備考	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.
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

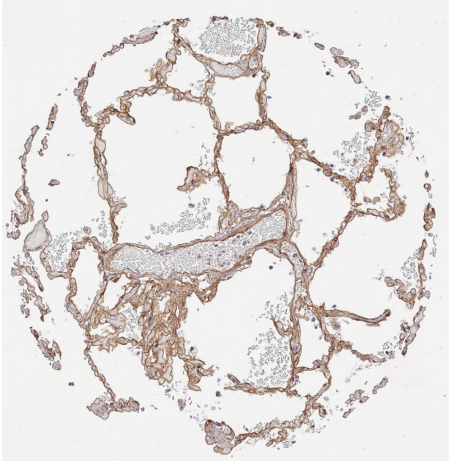
The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab6586の使用に適用されます**
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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.

ターゲット情報

機能	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.
組織特異性	Highly expressed in placenta.
関連疾患	<p>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.</p> <p>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.</p> <p>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.</p>
配列類似性	<p>Belongs to the type IV collagen family.</p> <p>Contains 1 collagen IV NC1 (C-terminal non-collagenous) domain.</p>
ドメイン	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.
翻訳後修飾	<p>Lysines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in all cases and bind carbohydrates.</p> <p>Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.</p> <p>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.</p> <p>The trimeric structure of the NC1 domains is stabilized by covalent bonds between Lys and Met residues.</p> <p>Proteolytic processing produces the C-terminal NC1 peptide, arresten.</p>
細胞内局在	Secreted > extracellular space > extracellular matrix > basement membrane.

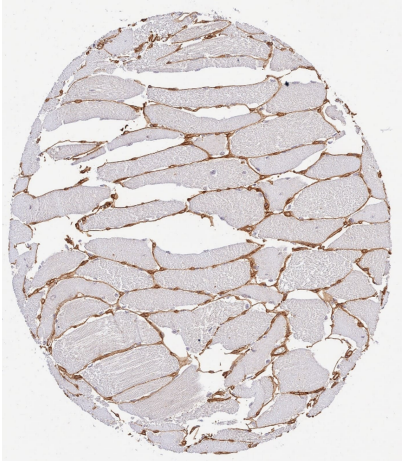
画像



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.

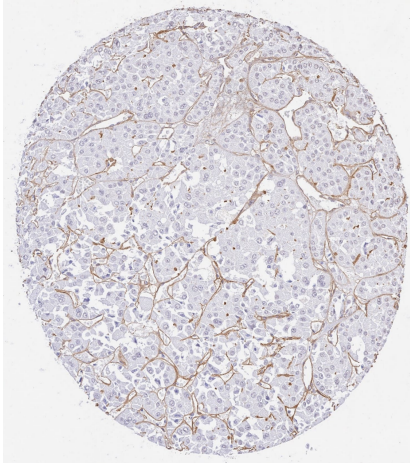
Heat induced epitope retrieval (HIER) using Tris-EDTA-citrate buffer pH 7.8 for 5 minutes.



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.

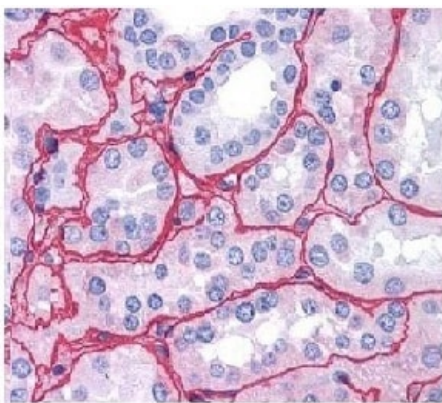
Heat induced epitope retrieval (HIER) using Tris-EDTA-citrate buffer pH 7.8 for 5 minutes.



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

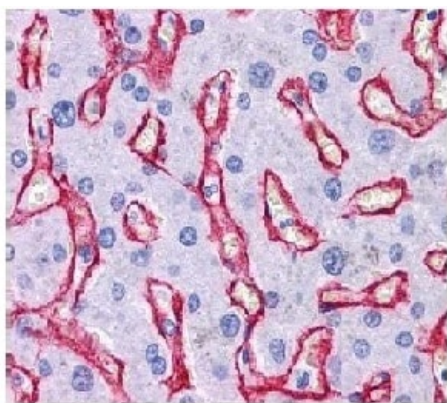
Immunohistochemical analysis of formalin-fixed paraffin-embedded human renal oncocytoma tissue labelling Collagen IV with ab6586 at 1/15 dilution for 1 hour at 37 °C followed by a ready to use Polymer-HRP, Rabbit/Mouse Detection Kit. Blocking: Peroxidase-Blocking Solution for 10 minutes. Substrate: DAB-Chromogen, 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.



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

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.

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