

# Anti-Collagen IV antibody [1043] ab86042

**9 References**   **3 图像**

### 概述

产品名称	Anti-Collagen IV抗体[1043]
描述	小鼠单克隆抗体[1043] to Collagen IV
宿主	Mouse
经测试应用	适用于: IHC-P, IHC-Fr
种属反应性	与反应: Human 不与反应: Rat, Rabbit, Cow, Pig
免疫原	Full length native protein (purified) corresponding to Human Collagen IV. fusion of Sp 2/0 mouse myeloma cells with spleen cells from a BABL/c mouse immunized with purified human type IV collagen. The immunogen has been isolated from human placenta.
常规说明	<p>In IHC, recognizes the extracellular – basement membranes.</p> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result, we are pleased to offer this antibody in a purified format as of 27<sup>th</sup> October 2017. The following lots are still unpurified and still in stock as of 27<sup>th</sup> October 2017- GR275641-7, GR275641-13, and GR275641-14. Lot numbers other than GR275641-7, GR275641-13, and GR275641-14 will be purified. Please note that the dilutions may need to be adjusted accordingly. Purified antibodies have the advantage of being enriched for the fraction of immunoglobulin that specifically reacts with the target antigen and for having a reduction of serum proteins.</p> <p>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.</p> <p>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&amp;As</p>

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
存储溶液	Preservative: 0.09% Sodium azide Constituent: PBS

纯度	Affinity purified
纯化说明	From tissue culture supernatant
Primary antibody说明	In IHC, recognizes the extracellular – basement membranes.
克隆	单克隆
克隆编号	1043
骨髓瘤	Sp2/0
同种型	IgG1

应用

**The Abpromise guarantee**      **Abpromise™**承诺保证使用ab86042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
IHC-P		1/50 - 1/100. Perform enzymatic antigen retrieval before commencing with IHC staining protocol.
IHC-Fr		1/50 - 1/100.

靶标

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.

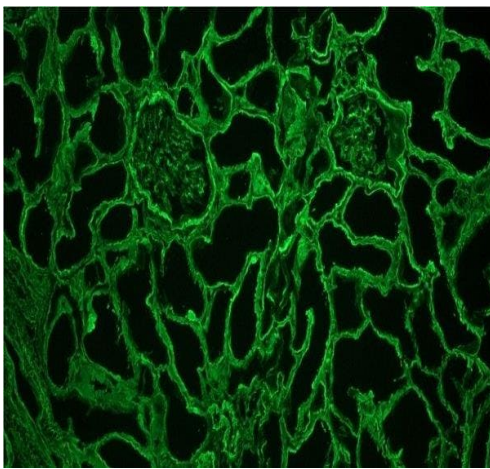
The trimeric structure of the NC1 domains is stabilized by covalent bonds between Lys and Met residues.

Proteolytic processing produces the C-terminal NC1 peptide, arresten.

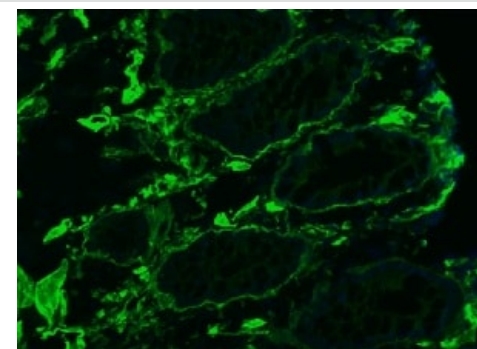
## 细胞定位

Secreted > extracellular space > extracellular matrix > basement membrane.

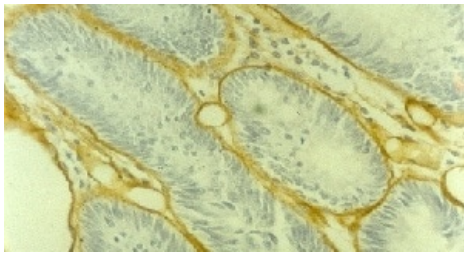
## 图片



ab86042 (TCS version) staining Collagen IV in Human kidney tissue sections by Immunohistochemistry (IHC-Fr - frozen sections).



Immunohistochemistry on frozen section of Human colon with ab86042 (TCS version).



Immunohistochemistry on paraffin section of Human skin

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Collagen IV antibody  
[1043] (ab86042)

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