

**Collagen IV mouse Monoclonal Antibody(8E5)**

<b>Catalog No :</b>	YM3756
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	IF;IHC
<b>Target :</b>	Collagen IV
<b>Fields :</b>	>>PI3K-Akt signaling pathway;>>Focal adhesion;>>ECM-receptor interaction;>>Relaxin signaling pathway;>>AGE-RAGE signaling pathway in diabetic complications;>>Protein digestion and absorption;>>Amoebiasis;>>Human papillomavirus infection;>>Pathways in cancer;>>Small cell lung cancer
<b>Gene Name :</b>	COL4A1
<b>Protein Name :</b>	Collagen alpha-1(IV) chain [Cleaved into: Arresten]
<b>Human Gene Id :</b>	1282
<b>Human Swiss Prot No :</b>	p02462
<b>Mouse Swiss Prot No :</b>	P02463
<b>Immunogen :</b>	Synthesized peptide derived from human Collagen Type IV AA range: 1600-1669
<b>Specificity :</b>	The antibody detects endogenous Collagen IV protein
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	IF 1:50-200 IHC 1:50-300
<b>Purification :</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.

**Concentration :** 1 mg/ml

**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 161kD

**Cell Pathway :** Focal adhesion;ECM-receptor interaction;Pathways in cancer;Small cell lung cancer;

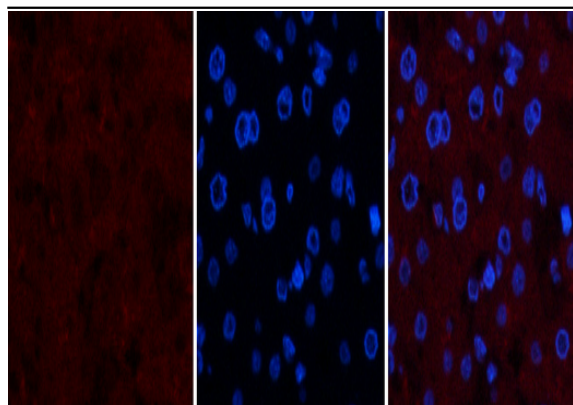
**Background :** This gene encodes a type IV collagen alpha protein. Type IV collagen proteins are integral components of basement membranes. This gene shares a bidirectional promoter with a paralogous gene on the opposite strand. The protein consists of an amino-terminal 7S domain, a triple-helix forming collagenous domain, and a carboxy-terminal non-collagenous domain. It functions as part of a heterotrimer and interacts with other extracellular matrix components such as perlecan, proteoglycans, and laminins. In addition, proteolytic cleavage of the non-collagenous carboxy-terminal domain results in a biologically active fragment known as arresten, which has anti-angiogenic and tumor suppressor properties. Mutations in this gene cause porencephaly, cerebrovascular disease, and renal and muscular defects. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014],

**Function :** disease:Defects in COL4A1 are a cause of brain small vessel disease with hemorrhage [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.,disease:Defects in COL4A1 are a cause of porencephaly type 1 [MIM:175780]; also known as encephaloclastic porencephaly. 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. Inheritance is autosomal dominant.,disease: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 bas

**Subcellular Location :** Secreted, extracellular space, extracellular matrix, basement membrane .

**Expression :** Highly expressed in placenta.

## Products Images

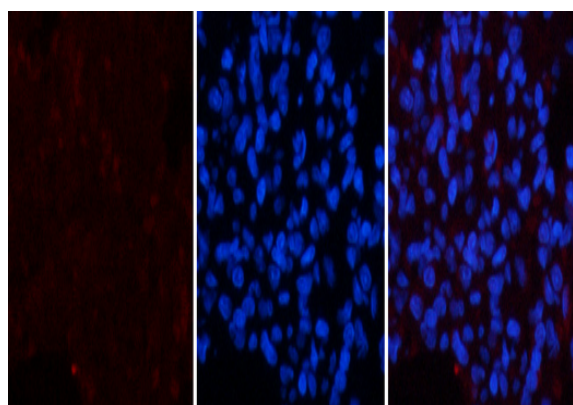


A

B

C

Immunofluorescence analysis of human-liver tissue. 1, Collagen IV Mouse Monoclonal Antibody(8E5)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture C: merge of A+B

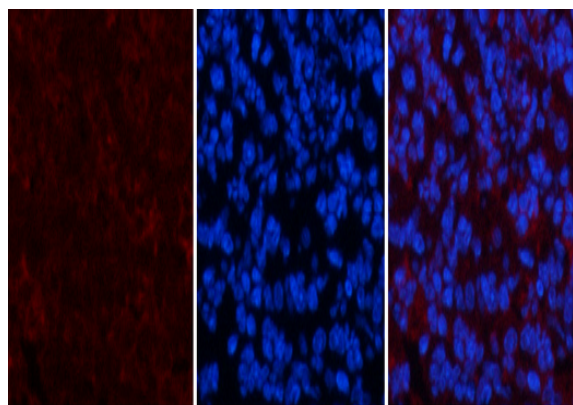


A

B

C

Immunofluorescence analysis of rat-lung tissue. 1, Collagen IV Mouse Monoclonal Antibody(8E5)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture C: merge of A+B

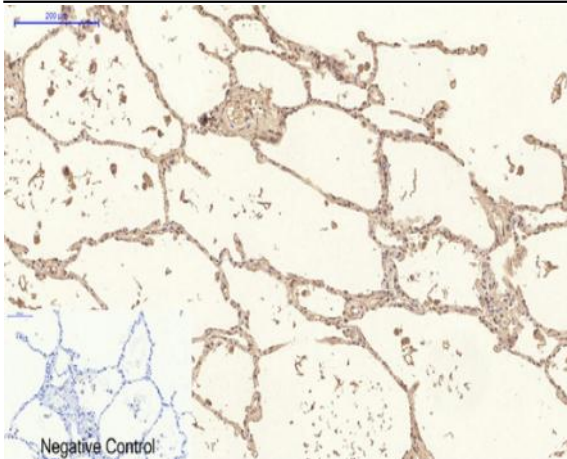


A

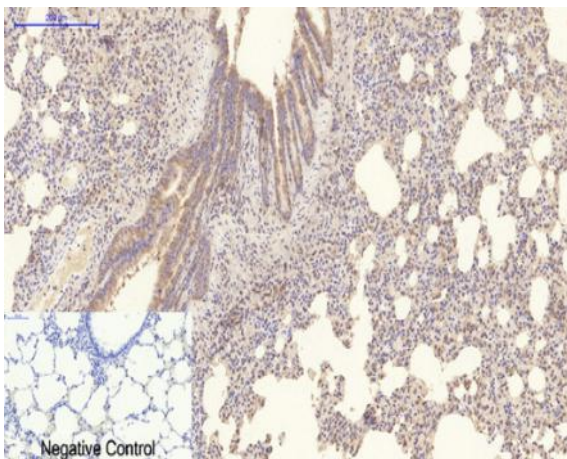
B

C

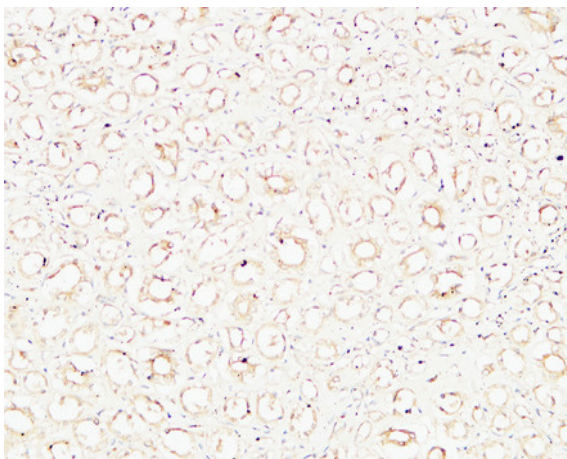
Immunofluorescence analysis of mouse-spleen tissue. 1, Collagen IV Mouse Monoclonal Antibody(8E5)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human lung tissue. 1, Collagen IV Mouse Monoclonal Antibody(8E5) was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Rat lung tissue. 1, Collagen IV Mouse Monoclonal Antibody(8E5) was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human kidney. 1, Antibody was diluted at 1:200(4°C overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 30min).