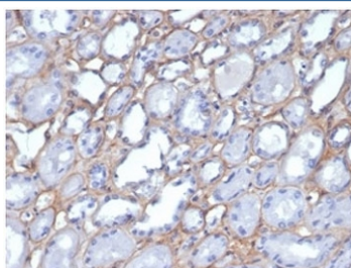


Collagen IV Antibody / COL4A1/2 [clone M3F7] (V9184)

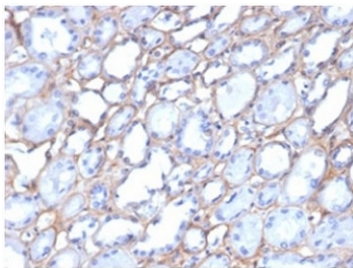
Catalog No.	Formulation	Size
V9184-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9184-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9184SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

[Bulk quote request](#)

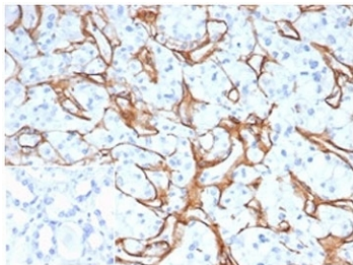
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	M3F7
Purity	Protein A/G affinity
UniProt	P02462& P08572
Localization	Secreted
Applications	Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Collagen IV antibody is available for research use only.



IHC staining of FFPE human kidney tissue with Collagen IV antibody (clone M3F7).
HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human kidney tissue with Collagen IV antibody (clone M3F7).
HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human kidney adenocarcinoma tissue with Collagen IV antibody (clone M3F7) at 2ug/ml in PBS for 30min RT. Strong staining of glomeruli is observed.
Negative control inset: PBS instead of primary antibody to control for secondary binding.
HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

Collagen Type IV is a major component of the basement membrane and plays an important role in cell adhesion, migration, differentiation and growth. Collagen Type IV express at the basement membranes in a variety of tissues including kidney, muscle, lymph nodes, lung, tendon and spleen. Collagen Type IV has been shown to be useful in differentiating microinvasive from in situ ductal carcinomas of the breast. Other Collagen Type IV studies include use in pancreatic adenocarcinoma and chronic pancreatitis, nephrosclerosis and other kidney diseases, oral squamous cell carcinoma, laryngeal cancers, ovarian cancers and cervical cancers. Type IV collagen is the major structural component of glomerular basement membranes (GBM), forming a 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. M3F7 recognizes type IV collagen in basement membranes in kidney, lung, placenta, cornea and skin. This antibody does not recognize denatured type IV collagen.

Application Notes

Optimal dilution of the Collagen IV antibody should be determined by the researcher.

Immunogen

An amino acid sequence from the alpha1 (IV)-alpha2(IV) triple helix was used as the immunogen for the Collagen IV antibody. This antibody does not recognize denatured type IV collagen.

Storage

Aliquot the Collagen IV antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

