Collagen IV (COL4A1/COL4A2) Antibody

Mouse Monoclonal Antibody [Clone M3F7]

Catalog No	Format	Size
1282-MSM3-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
1282-MSM3-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
1282-MSM3-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

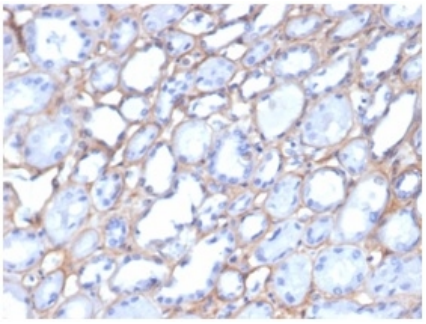
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

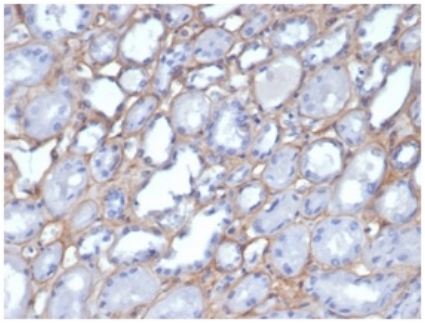
Clone	M3F7
Gene Name	COL4A1
Immunogen	alpha1 (IV)-alpha2(IV) triple helix. The epitope is triple helical domain about 900 from the N-terminus
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	100kDa / 50kDa
Cellular Localization	Basement membrane, Extracellular matrix, Extracellular space, Secreted
Species Reactivity	Human
Positive Control	Human kidney, placenta or tonsil. Placenta tissue lysates.

**Optimal dilution for a specific application should be determined.*

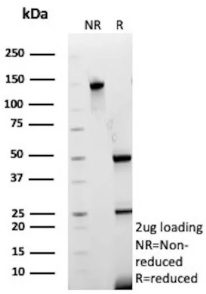
Product Images for Collagen IV (COL4A1/COL4A2) Antibody



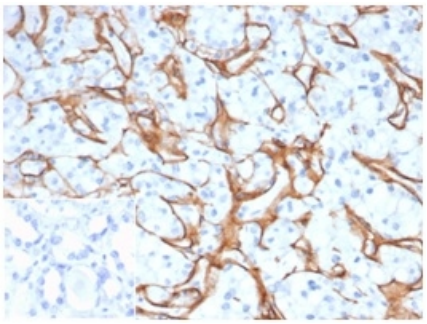
Formalin-fixed, paraffin-embeddedhuman kidney stained with CollagenIVMouse Monoclonal Antibody (M3F7).



Formalin-fixed, paraffin-embeddedhuman kidney stained with CollagenIVMouse Monoclonal Antibody (M3F7).



SDS-PAGE Analysis of Purified Collagen IV Mouse Monoclonal Antibody (COL4/6307). Confirmation of Purity and Integrity of Antibody



Formalin-fixed, paraffin-embedded human kidney adenocarcinoma. Strong staining of glomeruli using M3F7 at 2ug/ml in PBS for 30min RT. Inset: PBS instead of primary antibody, secondary negative control.

Specificity & Comments

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 '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. M3F7 recognizes type IV collagen in basement membranes in kidney, lung, placenta, cornea and skin. This antibody does not recognize denatured type IV collagen.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Lung Cancer, Signal Transduction

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.