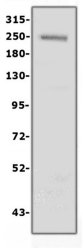
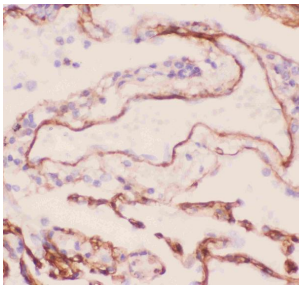
Product Data Sheet: Collagen Type IV

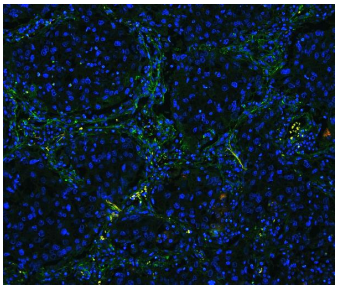
Cat. No:	AB-82621
Conjugate:	Unconjugated
Size:	200 ug
Clone:	POLY
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	E.coli-derived human Collagen IV recombinant protein (Position: G1445-T1669). Human Collagen IV shares 97% amino acid (aa) sequence identity with mouse Collagen IV.
Reactivity:	Human
Applications:	Western blot: 1:1000-1:3000 Immunohistochemistry (Paraffin-embedded Section): 1:500- 1:1000 Immunofluorescence: 1:100-1:300
Molecular Weight:	250 kDA
Purification:	Aff. Pur.
Background:	COL4A1, also known as ICH or Collagen alpha-1 (IV), is a protein that in humans is encoded by the COL4A1 gene. It is mapped to 13q34. This gene encodes the major type IV alpha collagen chain of basement membranes. Like the other members of the type IV collagen gene family, this gene is organized in a head-to-head conformation with another type IV collagen gene so that each gene pair shares a common promoter. COL4A1 binds to alpha-1/beta-1 integrin and inhibits migration, proliferation, and tube formation by endothelial cells. It is also a potential therapeutic candidate for targeting tumor angiogenesis.
Form:	Liquid
Buffer:	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage:	Store at -20˚C for one year.Avoid repeated freeze-thaw cycles.



Western blot analysis of Collagen IV using anti- Collagen IV antibody.Electrophoresis was performed on a 5-20% SDS-PAGE gel at70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human placenta tissue lysates

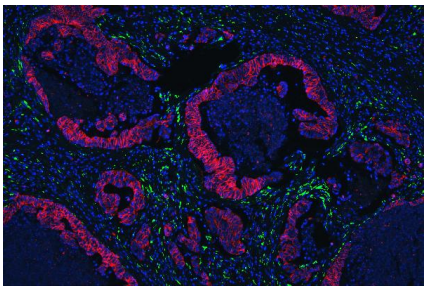


HC analysis of Collagen using anti-Collagen antibody.Collagen was detected in paraffin-embedded section of human lung cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval
solution) for 20 mins. The tissue section was blocked with 10% goat serum. The



IF analysis of COL4A1 using anti-COL4A1 antibody COL4A1 was detected in paraffin-embedded section of human lung cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- Collagen IV antigen affinity purified polyclonal antibody at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an(ECL) kit) with Tanon 5200 system. A specific band was detected for Collagen IV at approximately 250KD. The expected band size for Collagen IV is at 161KD.



COL4A1/E Cadherin was detected in paraffin-embedded section of human colon cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/mL rabbit anti-COL4A1 Antibody /mouse anti E Cadherin Antibody overnight at 4°C. Alexa Fluor 488 Conjugated Goat Anti-Rabbit IgG /Cy3 conjugated Goat anti mouse IgG,were used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section
was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

tissue section was then incubated with 1ug/ml rabbit anti-Collagen Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex
(SABC)with DAB as the chromogen.

1ug/mL rabbit anti-COL4A1 Antibody overnight at 4°C. Biotin conjugated goat anti-rabbit IgG was
used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using DyLight®488
Conjugated Avidin. The section was counterstained with DAPI. Visualize using a fluorescence microscope and
filter sets appropriate for the label used