

Mouse Collagen Type IV Monoclonal Antibody

Collagen Type IV

CATALOG # AAA59203	HOST Mouse	REACTIVITY Human, Rat, Canine, Horse
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PRODUCT SYNONYMS

Collagen Type IV; Monoclonal Antibody; anti-Collagen Type IV antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Rat, Canine, Horse
Clonality	Monoclonal
Isotype	IgG1/K
Clone Number	CIV22
Form/Format	Anti-Collagen Type IV is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.
Control	Muscle, Lung
Localization	Cytoplasmic
Reactivity Note	Paraffin, Frozen
Precautions	1. This product contains <0.1% sodium azide (NaN₃) as a preservative. Ensure proper handling procedures are used with this reagent. 2. Always wear personal protective equipment such as a laboratory coat, goggles, and gloves when handling reagents. 3. Dispose of unused solution with copious amounts of water. 4. Do not ingest reagent. If reagent is ingested, seek medical advice immediately. 5. Avoid contact with eyes. If contact occurs, flush with large quantities of water. 6. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar). 7. For additional safety information refer to the Safety Data Sheet for this product. 8. For complete recommendations for handling biological specimens, please refer to the CDC document,
Mounting Protocol IHC	For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter or organic solvent-based resin such as PermaMounter.
Mounting Protocol IF	1. Bring FluoroMounter or FluoroMounter with DAPI to room temperature. 2. Rinse slides with distilled or deionized water. 3. Remove excess water from slides before laying them flat in the dark. 4. Turn the media bottle upside down before opening the dropper bottle. 5. Apply 1-3 drops of FluoroMounter to each slide making sure the specimen is covered. 6. Incubate 3-5 minutes at room temperature in the dark. 7. Coverslip. 8. Observe under a fluorescent microscope using the appropriate filters. 9. The slides are recommended to be stored at 2-8 °C in the dark.
Product Limitations	Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized, and incubation time), optimal performance should be established through the use of positive and negative controls.

**Preparation for Frozen Tissues
Procedure**

1. Embed the specimen in OCT inside the cryostat.
2. Cut sections at 5 microns.
3. Place the section on a positively charged glass slide.
4. Air dry for 30-60 minutes.
5. Fix in acetone 100% for 2-10 minutes.
6. Air dry for another 10 minutes.

Preparation and Storage

Store at 2 to 8 degree C in the dark.

IMAGES

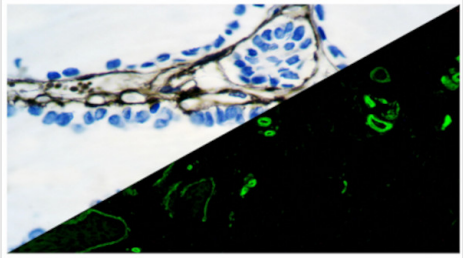
Abbreviated AmpliDetector Plus FITC IF Protocol

Step	Incubation Time
Rinse slides in wash buffer	
ImmuDNA Digestor (Proteinase K)	varies
Peroxidase Blocker	5 min.
Apply Antibody	5 min.
Apply Mouse/Rabbit Link	5 min.
Apply HRP Label	5 min.
Keep FITC reagents and slides in the dark	
Apply AmpliDetector FITC solution	5 min.
Coverslip with IF mounting medium	

Abbreviated Immunohistochemical Protocol

Step	ImmuDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus HRP
ImmuDNA Digestor (Proteinase K)	Varies	Varies	Varies
Peroxidase/AP Blocker	5 min.	5 min.	5 min.
Primary Antibody	30-60 min.	30-60 min.	30-60 min.
1st Step Detection	10 min.	30-45 min.	15 min.
2nd Step Detection	10 min.	Not Applicable	15 min.
Substrate- Chromogen	5-10 min.	5-10 min.	5-10 min.
Counterstain / Coverslip	Varies	Varies	Varies

Application Data



IF (Immunofluorescence)
Inset: IHC and IF of Collagen Type IV on a FFPE Skin Tissue

Application Data



IHC (Immunohistochemistry)

Antibody Type	Dilution	Volume/QTY
Prediluted	Ready-To-Use	3.0 ml
Prediluted	Ready-To-Use	7.0 ml
Prediluted	Ready-To-Use	15.0 ml
Concentrated	1:10-1:30	0.1 ml
Concentrated	1:10-1:30	0.5 ml
Concentrated	1:10-1:30	1.0 ml
Control Slides		5

Dilution Info

ADDITIONAL INFORMATION

Related Product Information for anti-Collagen Type IV antibody

Collagen is the main protein of connective tissue in animals and the most abundant protein in mammals, making up about 25% of the total protein content. Collagen IV is a major constituent of the basement membranes, along with laminins and enactins. It is composed of the alpha 1 IV chain and alpha 2 IV chain in a 2:1 ratio. It can form insoluble fibers with high tensile strength. Normal tissue stains with this antibody in a manner consistent with the sites of mesenchymal elements and epithelial basal laminae. Antibody to collagen IV is useful in detecting the loss of parts of basement membrane in carcinomas. Collagen IV can also be useful in the classification of soft tissue tumors; Schwannomas, Leiomyomas, and their well-differentiated malignant counterparts usually immunoreact to this antibody. The vascular nature of neoplasms, Hemangiopericytoma, Angiosarcoma and Epithelioid Hemangioendothelioma can be observed with this antibody.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

