Collagen I Monoclonal Antibody (5D8-G9)

Product Details	
Size	100 µg
Species Reactivity	Bovine, Human, Pig
Published Species	Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	5D8-G9
Conjugate	Unconjugated
Immunogen	Purified, full-length native human collagen I protein
Form	Liquid
Concentration	1 mg/mL
Purification	Protein A
Storage buffer	PBS with 1mg/mL BSA, 30% glycerol
Contains	0.05% sodium azide
Storage conditions	-20°C
RRID	AB_2536845

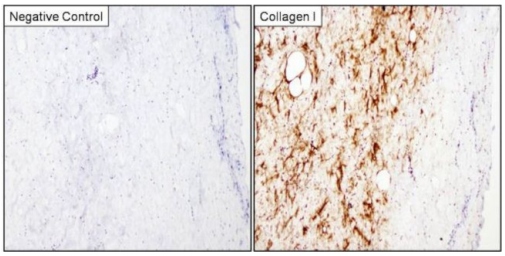
Applications	Tested Dilution	Publications
Western Blot (WB)	1:500-1:2,000	2 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:10 - 1:100	-
Immunohistochemistry (Frozen) (IHC (F))	1:200-1:1,000	-
ELISA (ELISA)	0.4-50 µg/mL	-

Product Specific Information

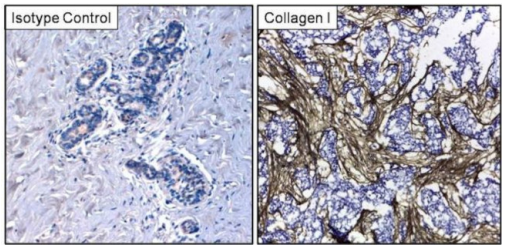
MA1-141 detects collagen I from bovine, human, and porcine. This antibody will not cross react with collagen 2-11, or detect thermally denatured collagen. Western blot analysis of recombinant bovine collagen I using MA1-141 detected a predominant band around 270kD likely corresponding to the alpha-1 dimer and a fainter band at a higher MW likely corresponding to the alpha-1/alpha-2 trimer.

MA1-141 has been successfully used in ELISA, immunofluorescence, immunohistochemistry (frozen and paraffin), and Western blot procedures. The epitope is sensitive to routine formalin fixation and paraffin embedding. Strong staining of connective tissue fibres is seen in acetone-fixed or unfixed frozen sections.

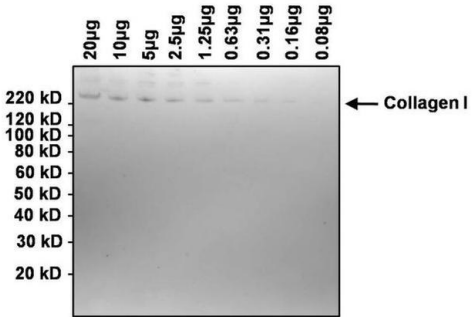
Product Images For Collagen I Monoclonal Antibody (5D8-G9)



Collagen I Antibody (MA1-141) in IHC (P)
Immunohistochemistry analysis of Collagen I was performed on porcine skin tissue. To expose target proteins, antigen retrieval was performed by microwaving tissues for 8-15 minutes in 10mM sodium citrate buffer (pH 6.0). Following antigen retrieval, tissues were blocked in 3% hydrogen peroxide-methanol for 15 min at room temperature, washed with deionized water and PBS, and then probed with a Collagen I monoclonal antibody (Product # MA1-141) diluted 1:20 in 3% BSA-PBS (right panel) or incubated with buffer alone not containing primary antibody as a negative control (left panel), overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Collagen I Antibody (MA1-141) in IHC (F)
Immunohistochemistry analysis of Collagen I was performed on frozen human breast carcinoma tissue. Tissues were probed with a Collagen I monoclonal antibody (Product # MA1-141, right panel) or mouse IgG isotype control (left panel) at a dilution of 1:500 for 1 hour at room temperature. Tissues were washed, and detection was performed using an HRP-conjugated universal detection reagent followed by DAB substrate. Tissues were counterstained and prepped for mounting before visualization by light microscopy.



Collagen I Antibody (MA1-141) in WB
Western blot analysis of collagen I was performed by loading the indicated amounts of bovine collagen I onto a 4-12% Bis-Tris polyacrylamide gel. Proteins were transferred to a nitrocellulose membrane and blocked with 5% BSA in TBST for at least 1 hour. The membrane was probed with a collagen I monoclonal antibody (Product # MA1-141) at a dilution of 1:1000 overnight at 4° C on a rocking platform, washed in TBST, and probed with an HRP-conjugated goat anti-mouse IgG secondary antibody (Product # 31430) at a dilution of 1: 20,000 for 1 hour. Chemiluminescent detection was performed using SuperSignal West Dura (Product # 34076).

View more figures on thermofisher.cn

2 References

Western Blot (2)

Biological research

Notum attenuates HBV-related liver fibrosis through inhibiting Wnt 5a mediated non-canonical pathways.

"MA1-141 was used in Western Blotting to investigate the anti-fibrotic effects of Notum."

Authors: Li W,Yu X,Zhu C,Wang Z,Zhao Z,Li Y,Zhang Y

Year
2019

Species
Human

The Journal of biological chemistry

Transforming Growth Factor- (TGF-) Directly Activates the JAK1-STAT3 Axis to Induce Hepatic Fibrosis in Coordination with the SMAD Pathway.

"Published figure using Collagen I monoclonal antibody (Product # MA1-141) in Western Blot"

Authors: Tang LY,Heller M,Meng Z,Yu LR,Tang Y,Zhou M,Zhang YE

Year
2017