

Collagen I/COL1A1 Rabbit PolymAb®

Catalog No.: A24112PM

Basic Information

Observed MW

220 kDa/140 kDa

Calculated MW

139 kDa

Category

Primary antibody

Applications

WB,IF/ICC,IF-F,IF-P,IHC-P,ELISA

Cross-Reactivity

Human, Mouse, Rat

Background

This gene encodes the pro- $\alpha 1$ chains of type I collagen whose triple helix comprises two $\alpha 1$ chains and one $\alpha 2$ chain. Type I is a fibril-forming collagen found in most connective tissues and is abundant in bone, cornea, dermis and tendon. Mutations in this gene are associated with osteogenesis imperfecta types I-IV, Ehlers-Danlos syndrome type VIIA, Ehlers-Danlos syndrome Classical type, Caffey Disease and idiopathic osteoporosis. Reciprocal translocations between chromosomes 17 and 22, where this gene and the gene for platelet-derived growth factor beta are located, are associated with a particular type of skin tumor called dermatofibrosarcoma protuberans, resulting from unregulated expression of the growth factor. Two transcripts, resulting from the use of alternate polyadenylation signals, have been identified for this gene.

Recommended Dilutions

WB 1:5000 - 1:36000**IF/ICC** 1:200 - 1:2000**IF-F** 1:200 - 1:2000**IF-P** 1:200 - 1:2000**IHC-P** 1:2000 - 1:8000

ELISA Recommended starting concentration is 1 $\mu\text{g/mL}$. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

1277

Swiss Prot

P02452

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

OI1; OI2; OI3; OI4; EDSC; CAFYD; EDSARTH1

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

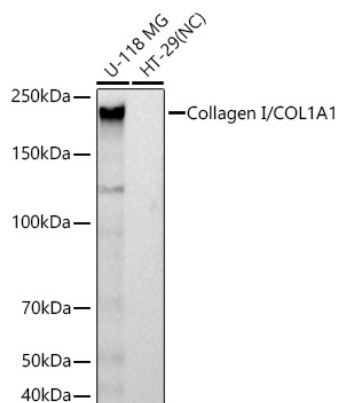
StorageStore at -20°C . Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

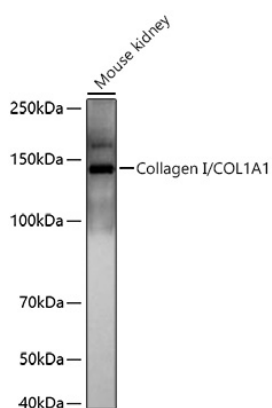
Contact

 | 400-999-6126 | cn.market@abclonal.com.cn | www.abclonal.com.cn

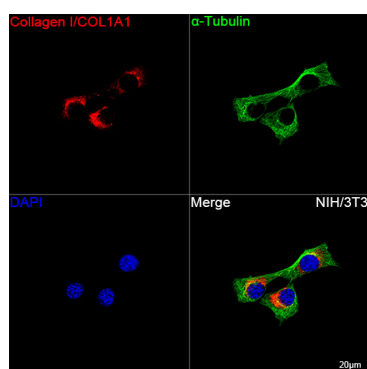
Validation Data



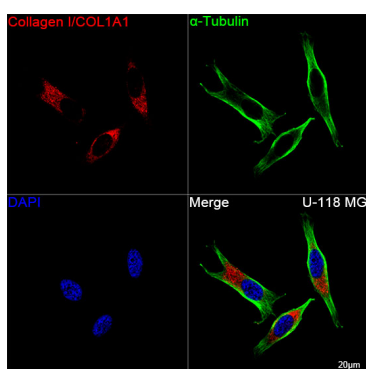
Western blot analysis of various lysates using Collagen I/COL1A1 Rabbit PolymAb® (A24112PM) at 1:6000 dilution incubated overnight at 4°C.
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates/proteins: 25 µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Negative control (NC): HT-29
 Exposure time: 10s.



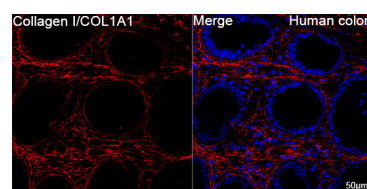
Western blot analysis of lysates from Mouse kidney using Collagen I/COL1A1 Rabbit PolymAb® (A24112PM) at 1:5000 dilution incubated overnight at 4°C.
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates/proteins: 25 µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Exposure time: 60 s.



Confocal imaging of NIH/3T3 cells using Collagen I/COL1A1 Rabbit PolymAb® (A24112PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

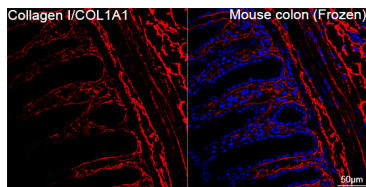


Confocal imaging of U-118 MG cells using Collagen I/COL1A1 Rabbit PolymAb® (A24112PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

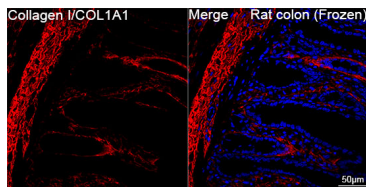


Confocal imaging of paraffin-embedded Human colon tissue using Collagen I/COL1A1 Rabbit PolymAb® (A24112PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.

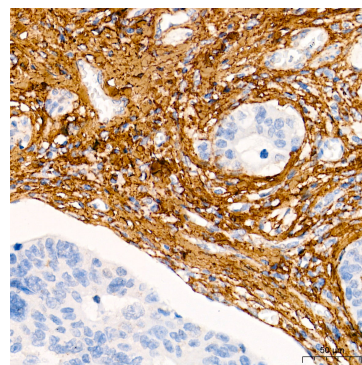
Validation Data



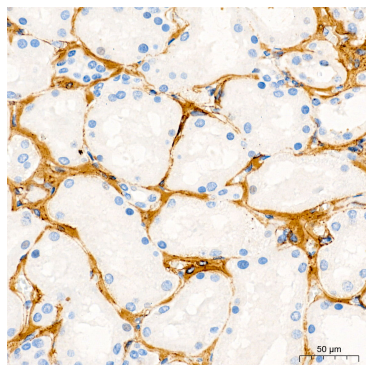
Confocal imaging of frozen sections Mouse colon tissue using Collagen I/COL1A1 Rabbit PolymAb® (A24112PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



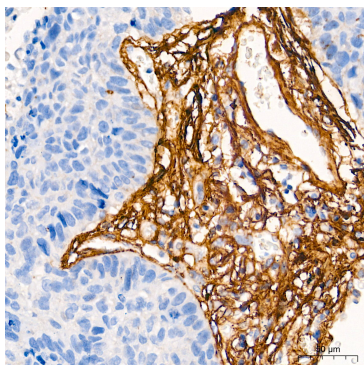
Confocal imaging of frozen sections Rat colon tissue using Collagen I/COL1A1 Rabbit PolymAb® (A24112PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



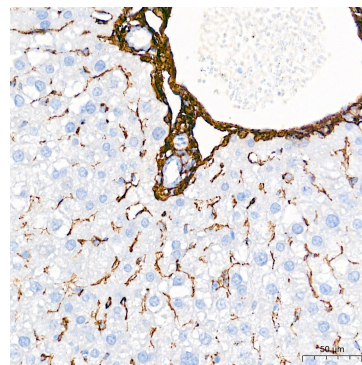
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using Collagen I/COL1A1 Rabbit PolymAb® (A24112PM) at a dilution of 1:6000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



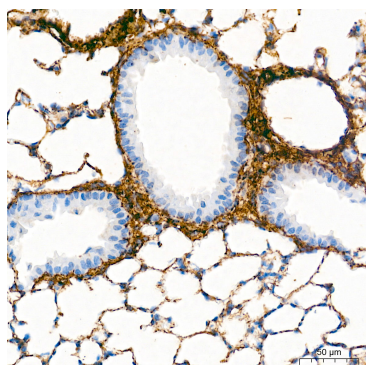
Immunohistochemistry analysis of paraffin-embedded Human kidney tissue using Collagen I/COL1A1 Rabbit PolymAb® (A24112PM) at a dilution of 1:6000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



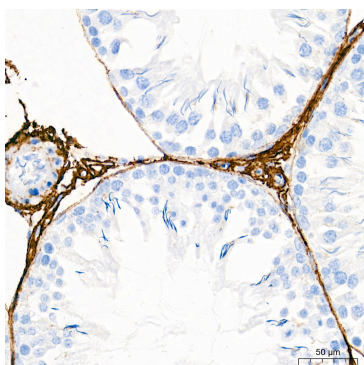
Immunohistochemistry analysis of paraffin-embedded Human lung cancer tissue using Collagen I/COL1A1 Rabbit PolymAb® (A24112PM) at a dilution of 1:6000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse liver tissue using Collagen I/COL1A1 Rabbit PolymAb® (A24112PM) at a dilution of 1:6000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse lung tissue using Collagen I/COL1A1 Rabbit PolymAb® (A24112PM) at a dilution of 1:6000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat testis tissue using Collagen I/COL1A1 Rabbit PolymAb® (A24112PM) at a dilution of 1:6000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.