

# Collagen I/COL1A1 Rabbit mAb

Catalog No.: A24112 **Recombinant**

## Basic Information

### Observed MW

Refer to figures

### Calculated MW

139kDa

### Category

Primary antibody

### Applications

WB, IHC-P, IF/ICC, (ELISA)

### Cross-Reactivity

Human, Mouse

### CloneNo number

ARC53617

## Background

This gene encodes the pro-alpha1 chains of type I collagen whose triple helix comprises two alpha1 chains and one alpha2 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

<b>WB</b>	1:1000 - 1:5000
<b>IHC-P</b>	1:50 - 1:200
<b>IF/ICC</b>	1:50 - 1:200
<b>ELISA</b>	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Contact

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## Immunogen Information

### Gene ID

1277

### Swiss Prot

P02452

### Immunogen

A synthetic peptide corresponding to a sequence within amino acids 1150-1250 of human Collagen I/COL1A1 (NP\_000079.2).

### Synonyms

OI1; OI2; OI3; OI4; EDSC; CAFYD; EDSARTH1; Collagen I/COL1A1

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

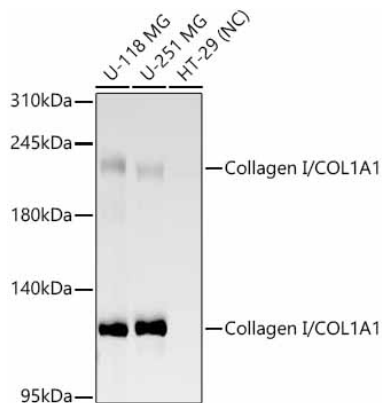
Affinity purification

### Storage

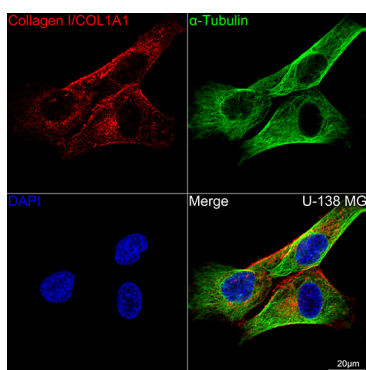
Store at -20°C. Avoid freeze / thaw cycles.

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

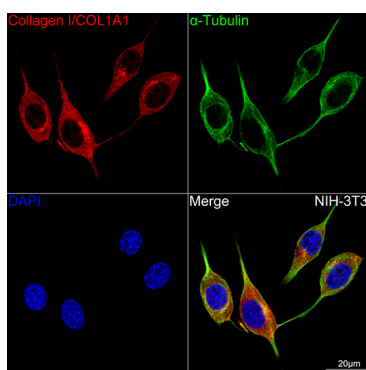
## Validation Data



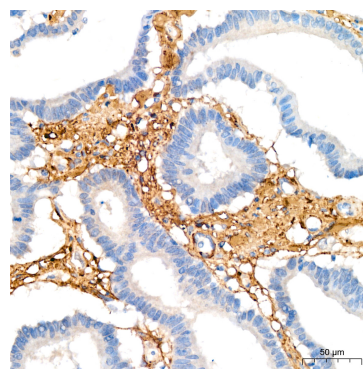
Western blot analysis of various lysates using Collagen I/COL1A1 Rabbit mAb (A24112) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Negative control (NC): HT-29. Exposure time: 90s.



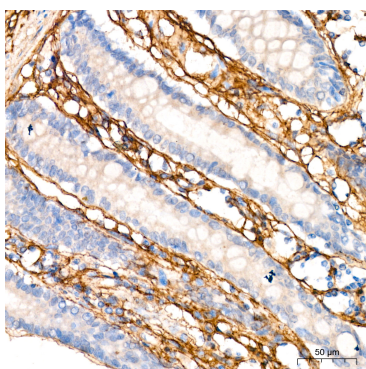
Confocal imaging of U-138 MG cells using Collagen I/COL1A1 Rabbit mAb (A24112, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with 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 NIH/3T3 cells using Collagen I/COL1A1 Rabbit mAb (A24112, 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.



Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using Collagen I/COL1A1 Rabbit mAb (A24112) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human colon tissue using Collagen I/COL1A1 Rabbit mAb (A24112) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.