ABclonal Technology ®

Collagen I/COL1A1 Rabbit mAb

Catalog No.: A22090   `Recombinant`   `12 Publications`

Basic Information

Observed MW
220kDa

Calculated MW
139kDa

Category
Primary antibody

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

Cross-Reactivity
Human, Mouse, Rat

CloneNo number
ARC53610

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

WB	1:1000 - 1:5000
IHC-P	1:500 - 1:2000
IF/ICC	1:200 - 1:800
ELISA	Recommended starting concentration is 1 µg/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; Collagen I/COL1A1

Contact

Product Information

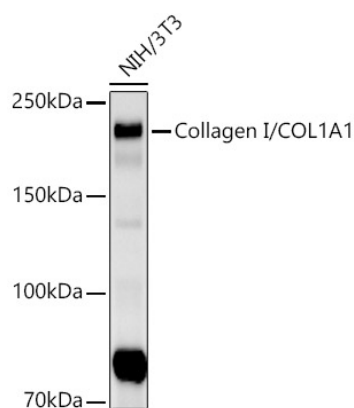| **Source**	**Isotype**	**Purification**
Rabbit	IgG	Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.

Validation Data

Western blot analysis of lysates from NIH/3T3 cells, using Collagen I/COL1A1 Rabbit mAb (A22090) at1:2000 dilution.
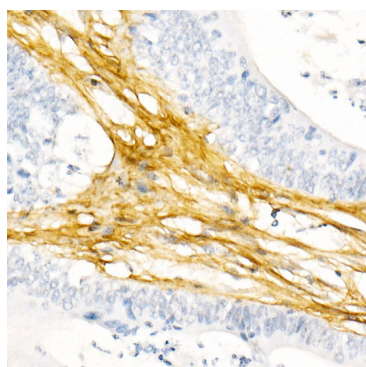Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
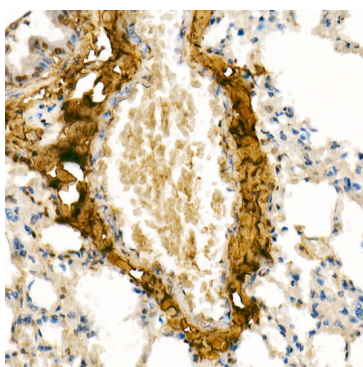Lysates/proteins: 25μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
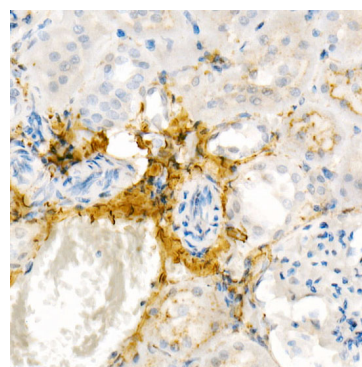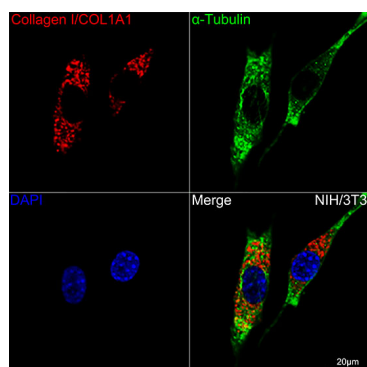Detection: ECL Basic Kit (RM00020).
Exposure time: 180s.

Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma using Collagen I/COL1A1 Rabbit mAb (A22090) at dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

Immunohistochemistry analysis of paraffin-embedded Mouse lung using Collagen I/COL1A1 Rabbit mAb (A22090) at dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

Immunohistochemistry analysis of paraffin-embedded Rat kidney using Collagen I/COL1A1 Rabbit mAb (A22090) at dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

Confocal imaging of NIH-3T3 cells using Collagen I/COL1A1 Rabbit mAb (A22090,dilution 1:200)(Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012,dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 60x.