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Pro-Collagen I/COL1A1 Rabbit mAb

Catalog No.: A26946 Recombinant

Basic Information

Observed MW
220kDa

Calculated MW
139kDa

Category
Primary antibody

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

Cross-Reactivity
Human

CloneNo number
ARC70097

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	1:13000 - 1:78000
IHC-P	1:1000 - 1:10000
IF/ICC	1:200 - 1:800
IP	0.5μg-4μg antibody for 200μg-400μg extracts of whole cells
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
Recombinant fusion protein containing a sequence corresponding to amino acids 26-161 of human Collagen I/COL1A1 (NP_000079.2).

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

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.09% Sodium azide,0.05% BSA,50% glycerol,pH7.3.

Contact

400-999-6126

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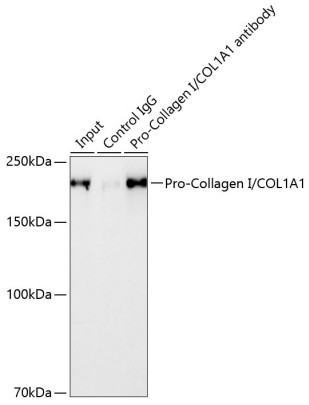
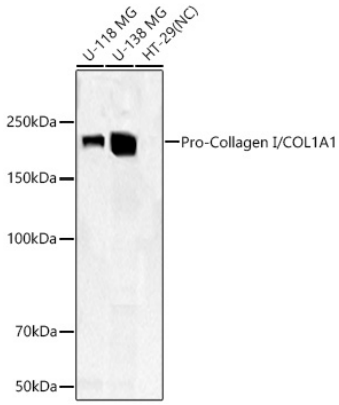
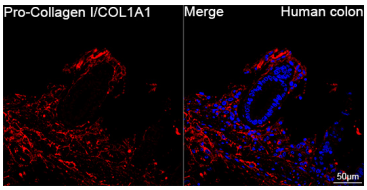
Validation Data



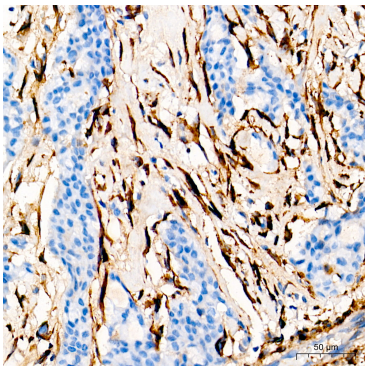
Immunoprecipitation of Pro-Collagen I/COL1A1 from 300 µg extracts of U-138MG cells was performed using 0.5 µg of Pro-Collagen I/COL1A1 Rabbit mAb (A26946). Rabbit IgG isotype control (AC042) was used to precipitate the Control IgG sample. IP samples were eluted with 1X reducing Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using Pro-Collagen I/COL1A1 Rabbit mAb (A26946) at a dilution of 1:13000.



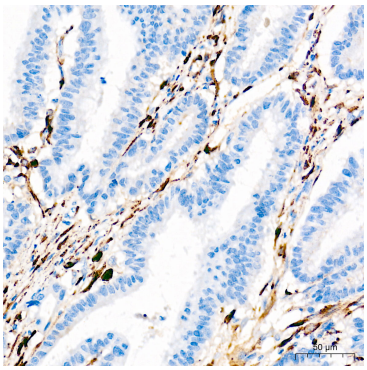
Western blot analysis of various lysates using Pro-Collagen I/COL1A1 Rabbit mAb (A26946) at 1:13000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Negative control (NC): HT-29
Exposure time: 10s.



Confocal imaging of paraffin-embedded Human colon tissue using Pro-Collagen I/COL1A1 Rabbit mAb (A26946, 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.

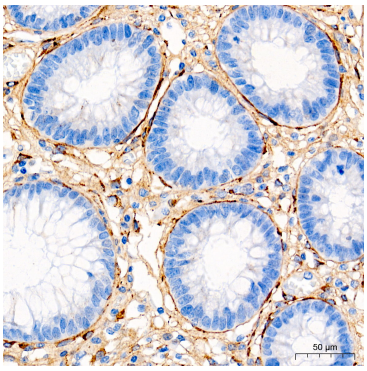


Immunohistochemistry analysis of paraffin-embedded Human breast cancer tissue using Pro-Collagen I/COL1A1 Rabbit mAb (A26946) at a dilution of 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

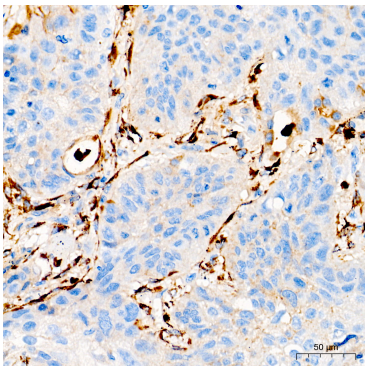


Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using Pro-Collagen I/COL1A1 Rabbit mAb (A26946) at a dilution of 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

Validation Data



Immunohistochemistry analysis of paraffin-embedded Human colon tissue using Pro-Collagen I/COL1A1 Rabbit mAb (A26946) at a dilution of 1:1300 (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 Pro-Collagen I/COL1A1 Rabbit mAb (A26946) at a dilution of 1:1300 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.