

Collagen III alpha 1/COL3A1 Rabbit mAb

Catalog NO.: A28948 **Recombinant**

Basic Information

Observed MW

Calculated MW

139 kDa

Category

Monoclonal Antibodies

Applications

IF-F, IF-P, IHC-P, ELISA

Cross-Reactivity

Mouse, Rat

Conjugation

Unmodified

Clone number

ARC81753

Background

This gene encodes the alpha-1 subunit of the fibril-forming type III collagen found in bone, cartilage, dentin, tendon, bone marrow stroma and other connective tissue. The encoded protein forms homotrimeric type III procollagen that undergoes proteolytic processing during fibril formation. A majority of mice lacking the encoded protein die within two days of birth but about 5% of the animals survive to adulthood. The surviving mice exhibit severe cortical malformation and experience significantly shorter lifespan. The mutant mouse named "tight skin 2" exhibiting systemic sclerosis phenotype was found to harbor a missense point mutation in this gene. A pseudogene of this gene has been defined on chromosome 8.

Recommended Dilutions

IF-F 1:200 - 1:800

IF-P 1:200 - 1:800

IHC-P 1:5000 - 1:20000

ELISA

Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥1:10000), a sequential dilution method is strongly recommended to ensure measurement accuracy.

Contact

Immunogen Information

Gene ID	Swiss Prot
12825	P08121

Immunogen

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

Synonyms

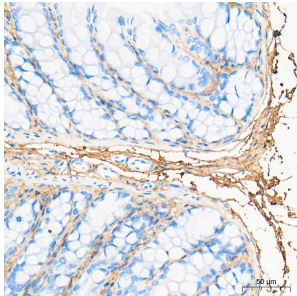
Tsk2; Tsk-2; Col3a-1

Product Information

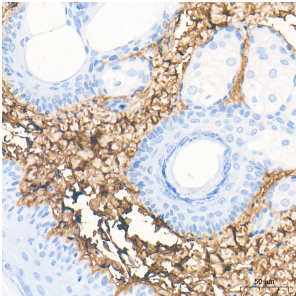
☒		order@abclonal.com
☒		service@abclonal.com
☒		www.abclonal.com

Source	Isotype	Purification
Rabbit	IgG	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.		

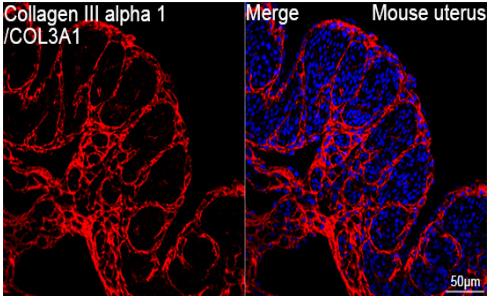
Validation Data



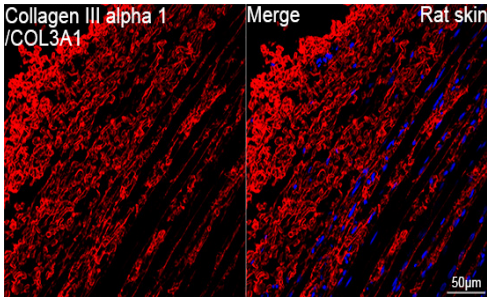
Immunohistochemistry analysis of paraffin-embedded Mouse colon tissue using Collagen III alpha 1/COL3A1 Rabbit mAb (A28948) at a dilution of 1:20000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



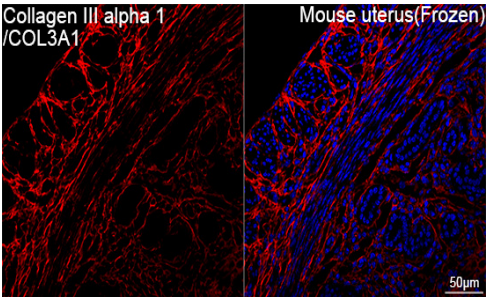
Immunohistochemistry analysis of paraffin-embedded Rat skin tissue using Collagen III alpha 1/COL3A1 Rabbit mAb (A28948) at a dilution of 1:20000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Confocal imaging of paraffin-embedded Mouse uterus tissue using Collagen III alpha 1/COL3A1 Rabbit mAb (A28948, dilution 1:200) followed by a further incubation with Cy3-conjugated 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.



Confocal imaging of paraffin-embedded Rat skin tissue using Collagen III alpha 1/COL3A1 Rabbit mAb (A28948, dilution 1:200) followed by a further incubation with Cy3-conjugated 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.



Confocal imaging of frozen sections of Mouse uterus tissue using Collagen III alpha 1/COL3A1 Rabbit mAb (A28948, dilution 1:200) followed by a further incubation with Cy3-conjugated 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.

