

Datasheet for ABIN5518708
anti-COL1A1 antibody (C-Term)

5 Images

74 Publications

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Overview

| | |
|----------------------|---|
| Quantity: | 100 µg |
| Target: | COL1A1 |
| Binding Specificity: | AA 1192-1207, C-Term |
| Reactivity: | Human, Rat, Mouse |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Application: | Western Blotting (WB), Immunocytochemistry (ICC), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)) |

Product Details

| | |
|-----------------------------|---|
| Purpose: | Rabbit IgG polyclonal antibody for Collagen alpha-1(I) chain(COL1A1) detection. Tested with WB, IHC-P, IHC-F, ICC in Human,Mouse,Rat. |
| Immunogen: | A synthetic peptide corresponding to a sequence at the C-terminus of mouse Collagen I(1192-1207aa QPPQEKSDGGRYRA), identical to the related rat sequence, and different from the related human sequence by two amino acids. |
| Sequence: | QPPQEKSDG GRYRA |
| Isotype: | IgG |
| Cross-Reactivity (Details): | No cross reactivity with other proteins. |
| Characteristics: | Rabbit IgG polyclonal antibody for Collagen alpha-1(I) chain(COL1A1) detection. Tested with WB, IHC-P, IHC-F, ICC in Human,Mouse,Rat. Gene Name: collagen, type I, alpha 1 |

Product Details

Protein Name: Collagen alpha-1(I) chain

Purification: Immunogen affinity purified.

Target Details

Target: COL1A1

Alternative Name: COL1A1 ([COL1A1 Products](#))

Background: Collagen, type I, alpha 1, also known as COL1A1, is a human gene that encodes the major component of type I collagen, the fibrillar collagen found in most connective tissues, including cartilage. This gene is mapped to 17q21.33. 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.

Synonyms: Alpha 1 type I collagen antibody|Alpha 2 type I collagen antibody|Alpha-1 type I collagen antibody|CO1A1_HUMAN antibody|COL1A1 antibody|COL1A2 antibody|Collagen alpha-1(I) chain antibody|Collagen I alpha 1 polypeptide antibody|Collagen I alpha 2 polypeptide antibody|Collagen Of Skin Tendon And Bone antibody|Collagen Type 1 antibody|Collagen type I alpha 1 antibody|Collagen type I alpha 2 antibody|OI4 antibody|Osteogenesis Imperfecta Type IV antibody|Pro alpha 1(I) collagen antibody|Type I procollagen antibody

UniProt: [P11087](#)

Pathways: [Sensory Perception of Sound](#), [Autophagy](#), [Growth Factor Binding](#)

Application Details

Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Rat, Predicted Species: Mouse, The detection limit for COL1A1 is approximately 0.5 ng/lane under reducing conditions.
IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Rat, Predicted Species: Mouse, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.
IHC-F: Concentration: 0.5-1 µg/mL, Tested Species: Human, Rat, Predicted Species: Mouse
ICC: Concentration: 0.5-1 µg/mL, Tested Species: Mouse, Predicted Species: Human, Rat
Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be

Application Details

fit for the product based on sequence similarities. Other applications have not been tested.
Optimal dilutions should be determined by end users.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P), IHC(F) and ICC.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg Thimerosal, 0.05 mg Sodium azide.

Preservative: Sodium azide, Thimerosal (Merthiolate)

Precaution of Use: This product contains Sodium azide and Thimerosal (Merthiolate): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

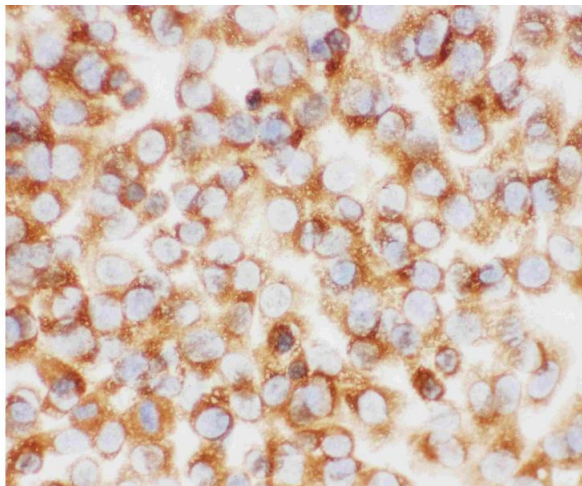
Storage: 4 °C, -20 °C

Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Publications

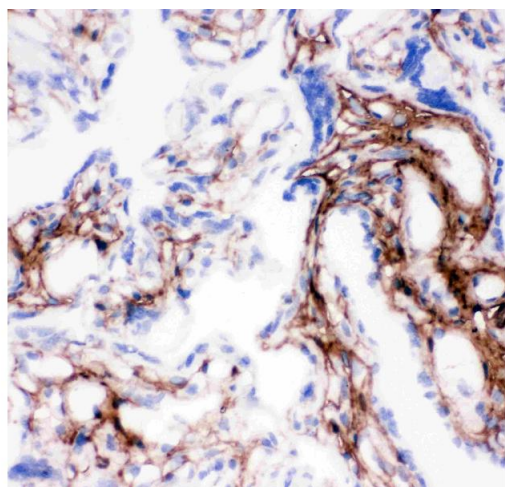
Product cited in: Pizzino, Irrera, Galfo, Oteri, Atteritano, Pallio, Mannino, D'Amore, Pellegrino, Aliquò, Anastasi, Cutroneo, Squadrito, Altavilla, Bitto: "Adenosine Receptor Stimulation Improves Glucocorticoid-Induced Osteoporosis in a Rat Model." in: **Frontiers in pharmacology**, Vol. 8, pp. 558, (2017) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)



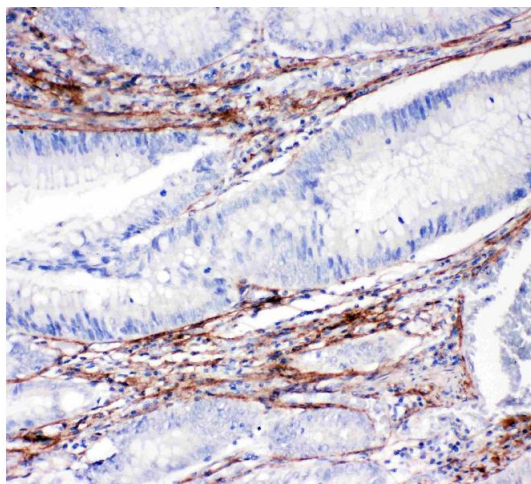
Immunofluorescence

Image 1. Anti-Collagen I antibody, ICC: NIH3T3 Cell



Immunohistochemistry

Image 2. Anti-Collagen I antibody, IHC(F): Human Placenta Tissue



Immunohistochemistry

Image 3. Anti-Collagen I antibody, IHC(P): Human Intestinal Cancer Tissue

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN5518708.