10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-Collagen Type I (RABBIT) Antibody

Collagen Type I Antibody
Catalog # ASR5139

Specification

Anti-Collagen Type I (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Mammalian**
Reactivity	**Rat, Pig, Human, Mouse, Bovine**
Clonality	**Polyclonal**
Application	**WB, IHC, E, IP, I, LCI**
Application Note	**Anti-Collagen Type I has been tested by Western blot, dot blot, and IHC and is suitable for indirect trapping ELISA for quantitation of antigen in serum using a standard curve, IP, native PAGE, immunofluorescence, and FC for highly sensitive qualitative analysis.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Collagen Type I from human and bovine placenta**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Collagen Type I (RABBIT) Antibody - Additional Information

Gene ID 1277

Other Names
1277

Purity
COLLAGEN I Antibody has been prepared by immunoaffinity chromatography using immobilized antigens. Some class-specific anti-collagens may be specific for three-dimensional epitopes which may result in diminished reactivity with denatured collagen or formalin-fixed, paraffin embedded tissues. This antibody reacts with most mammalian Type I collagens and has expected cross-reactivity with Type III and negligible cross reactivity with Type II, IV, V or VI collagens. Non-specific cross-reaction of anti-collagen antibodies with other human serum proteins or non-collagen extracellular matrix proteins has not been tested.

Storage Condition
Store vial at 4° C prior to opening. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. For extended storage, mix with an equal volume of glycerol, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

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Anti-Collagen Type I (RABBIT) Antibody - Protein Information

Name COL1A1

Function
Type I collagen is a member of group I collagen (fibrillar forming collagen).

Cellular Location
Secreted, extracellular space, extracellular matrix {ECO:0000255|PROSITE-ProRule:PRU00793}

Tissue Location
Forms the fibrils of tendon, ligaments and bones. In bones the fibrils are mineralized with calcium hydroxyapatite

Anti-Collagen Type I (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Collagen Type I (RABBIT) Antibody - Images

Anti-Collagen Type I (RABBIT) Antibody - Background

Rockland produces highly active antibodies and conjugates to collagens. Collagens are highly conserved throughout evolution and are characterized by an uninterrupted ''Glycine-X-Y'' triplet repeat that is a necessary part of the triple helical structure. For these reasons, it is often extremely difficult to generate antibodies with specificities to collagens. The development of ‘type’ specific antibodies is dependent on NON-DENATURED three-dimensional epitopes. Rockland extensively purifies collagens for immunization from human and bovine placenta and cartilage by limited pepsin digestion and selective salt precipitation. This preparation results in a native conformation of the protein. Antibodies are isolated from rabbit antiserum and are extensively cross-adsorbed by immunoaffinity purification to produce 'type' specific antibodies. Greatly diminished reactivity and selectivity of these antibodies will result if denaturing and reducing conditions are used for SDS-PAGE and immunoblotting. Collagen Type I is a protein that strengthens and supports many tissues in the body, including cartilage, bone, tendon, skin and the white part of the eye (sclera). Collagen Type I triple helix comprises of two alpha1 chains and one alpha2 chain. COL1A1/A2 could be useful for detecting melanoma, lung, liver, glioma, skin, stomach, and other cancers. Mutations in the gene may be related to caffey disease, osteogenesis, and ehlers-danlos syndrome. Anti-Collagen Type I Antibody is ideal for investigators involved in extracellular matrix protein, osteoporosis research, Cell Biology, Signal Transduction, and Stem Cell research.