

## Product datasheet for **TA397413S**

### Collagen I (COL1A1) Rabbit Polyclonal Antibody

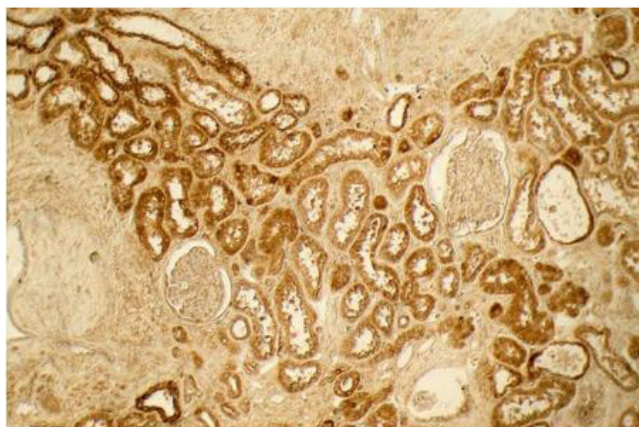
#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, FC, IF, IHC, IP, WB
Recommended Dilution:	<b>WB:</b> 1:1,000 - 1:10,000 <b>IHC:</b> 1:50 - 1:200 <b>IF:</b> User Optimized <b>FC:</b> User Optimized <b>ELISA:</b> 1:5,000 - 1:50,000 <b>FLISA:</b> 1:100
Reactivity:	Bovine, Human, Mouse, Rat, Pig
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Collagen Type I from human and bovine placenta
Specificity:	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.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	1.0 mg/ml - lot specific
Conjugation:	Unconjugated
Storage:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Stability:	Expiration date is one (1) year from date of receipt.



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<b>Gene Name:</b>	collagen type I alpha 1
<b>Database Link:</b>	<a href="#">Entrez Gene 1277 Human P02452</a>
<b>Background:</b>	<p>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.</p>
<b>Synonyms:</b>	rabbit anti-collagen type I antibody, Collagen Of Skin Tendon And Bone, Collagen Type 1 antibody, Collagen type I alpha 1 antibody, Collagen alpha-1 (I) chain, Alpha-1 type I collagen, type 1 procollagen alpha 1
<b>Note:</b>	Anti-Collagen Type I has been tested by dot blot and IHC and are useful for indirect trapping ELISA for quantitation of antigen in serum using a standard curve, immunoprecipitation, native (non-denaturing, non-dissociating) PAGE, immunohistochemistry, Immunofluorescence, FLOW, and western blotting for highly sensitive qualitative analysis.

**Product images:**

Rockland's Affinity Purified anti-Collagen I antibody was used at a 1:100 dilution to detect distal tubules in normal kidney tissue. Note the absence of staining of glomeruli. The antibody was reacted with antibody for 4 hours at room temperature followed by the addition of secondary antibody and substrate reaction. Tissue was formalin-fixed and paraffin embedded. No antigen retrieval was performed.