

Datasheet for 600-403-103**Collagen Type I Antibody Peroxidase Conjugated****Overview**

Description:	Anti-Collagen Type I (RABBIT) Antibody Peroxidase Conjugated - 600-403-103
Item No.:	600-403-103
Size:	50 µg
Applications:	WB
Reactivity:	Human, Mouse, Rat, Bovine
Host Species:	Rabbit

Product Details

Background:	COLLAGEN Type I Peroxidase Conjugated Antibody is specific for Collagen Type I. Collagen Type I (Type-I collagen) is the most abundant collagen of the human body. It is present in scar tissue, the end product when tissue heals by repair. It is also found in tendons, the endomysium of myofibrils and the organic part of bone. Anti-collagen Type I antibody is suitable for Cancer research and other general research.
Synonyms:	rabbit anti-collagen type I antibody peroxidase conjugation, HRP conjugated 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
Host Species:	Rabbit
Conjugate:	Peroxidase (HRP)
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	COL1A1
Reactivity:	Human, Mouse, Rat, Bovine
Immunogen Type:	Native Protein
Immunogen:	Collagen Type I from human and bovine placenta.

Purity/Specificity: This product 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.

Relevant Links:

- [NCBI - NP_000079.2](#)
- [UniProtKB - P02452](#)
- [GeneID - 1277](#)

Application Details

Suggested Applications: WB (Based on references)

Application Note: Anti-COLLAGEN Type I Peroxidase Conjugated Antibody is suitable for western blot, immunoprecipitation, Flow Cytometry, and immunohistochemistry. Researchers should determine optimal titers for applications that are not stated below.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:3,000 - 1:6,000

FC: 5µg/mL

IHC: 1:50 - 1:200

IP: 1:100

WB: 1:3,000 - 1:6,000

Formulation

Physical State: Lyophilized

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.01% (w/v) Thimerosal

Stabilizer: 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Reconstitution Volume: 50µL

Reconstitution Buffer: Restore with deionized water (or equivalent)

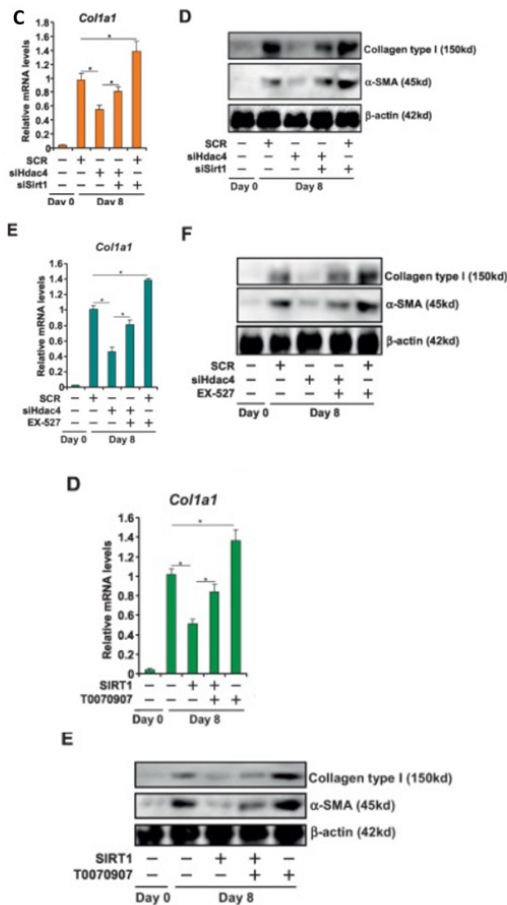
Shipping & Handling

Shipping Condition: Ambient

Storage Condition: Store vial at 4° C prior to restoration. Restore with 0.05 mL of deionized water (or equivalent). For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

qPCR and Western Blot of Anti-Collagen Type I. HDAC4 regulates HSC activation in a SIRT1-dependent manner. (C, D) Primary HSCs were transfected with indicated siRNAs. Expression levels of genes were examined by qPCR (C) and Western (D). (E, F) Primary HSCs were transfected with indicated siRNAs followed by treatment with EX-527. Expression levels of genes were examined by qPCR (E) and Western (F). Fig. 3. PMID: 28919365.

Western Blot

qPCR and Western Blot of Anti-Collagen Type I. SIRT1 antagonizes HSC activation via PPARγ deacetylation. (D, E) Primary mouse HSCs were infected with lentivirus carrying SIRT1 WT followed by treatment with a PPARγ antagonist (T0070907). Expression levels of fibrogenic genes were examined by qPCR and Western. Fig. 5. PMID: 28919365.

References

- Kong M et al. Ablation of serum response factor in hepatic stellate cells attenuates liver fibrosis. *J Mol Med (Berl)*. (2019)
- Li M et al. Hepatic stellate cell-specific deletion of SIRT1 exacerbates liver fibrosis in mice. *Biochim Biophys Acta Mol Basis Dis*. (2017)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.