Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 600-402-103

Collagen Type I Antibody Fluorescein Conjugated

Overview

Description:	Anti-Collagen Type I (RABBIT) Antibody Fluorescein Conjugated - 600-402-103
Item No.:	600-402-103
Size:	50 µg
Applications:	FC, WB
Reactivity:	Human, Mouse, Rat, Bovine
Host Species:	Rabbit

Product Details

Background:	COLLAGEN Type I Fluorescein 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 fluorescein conjugation, FITC 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:	Fluorescein (FITC)
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2-7

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:	FC, WB (Based on references)
Application Note:	Anti-COLLAGEN Type I Fluorescein 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

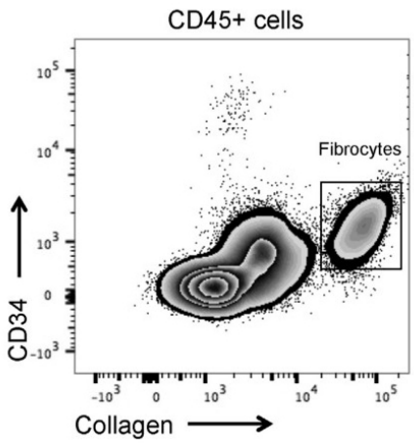
Formulation

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) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	50µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

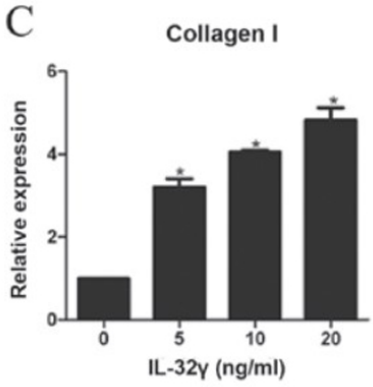
Shipping & Handling

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.

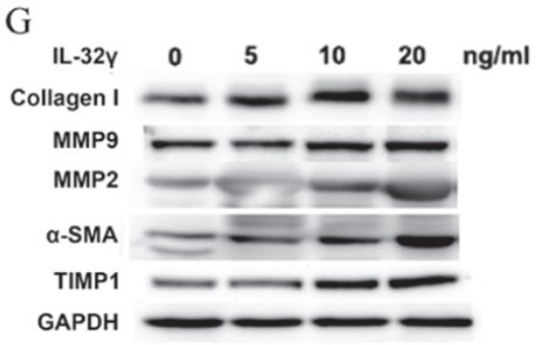
Images



Flow Cytometry
Gating strategy for flow cytometric analysis and cell sorting of circulating fibrocytes using using the LIVE/DEAD Fixable Blue Dead Cell Stain kit.
For intracellular staining of type I collagen–FITC on B cells cells were fixed and permeabilized with the BD Cytofix/Cytoperm kit. PMID: 31319101.



Effect of different concentrations (0, 5, 10 and 20 ng/ml) of IL□32γ on LX□2 activation phenotypes. Reverse transcription□quantitative polymerase chain reaction assessing mRNA levels of α-SMA,
(C) collagen I, representing the activation level of LX□2.
PMID: 29042996.



Western Blot
Effect of different concentrations (0, 5, 10 and 20 ng/ml) of IL-32γ on LX-2 activation phenotypes. (G) Western blot analysis was used to measure collagen I, MMP9, MMP2, α-SMA, TIMP1 and GAPDH expression in whole-cell extracts. PMID: 29042996.

References

- Della-Torre E, Rigamonti E, Perugino C, et al. B lymphocytes directly contribute to tissue fibrosis in patients with IgG4-related disease. *J Allergy Clin Immunol.* (2020)
- Liu et al. IL-32γ promotes integrin αvβ6 expression through the activation of NF-κB in HSCs. *Experimental and Therapeutic Medicine* (2017)

Disclaimer