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Datasheet for 600-406-103

Collagen Type I Antibody Biotin Conjugated

Overview

Description:	Anti-Collagen Type I (RABBIT) Antibody Biotin Conjugated - 600-406-103
Item No.:	600-406-103
Size:	100 µg
Applications:	Dot Blot, FC, Multiplex, ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	COLLAGEN Type I Antibody Biotin Conjugated 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 biotin conjugation, biotin 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:	Biotin
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	10-20

Target Details

Gene Name:	COL1A1
Reactivity:	Human, Mouse, Rat
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

Tested Applications:	Dot Blot, FC, Multiplex
Suggested Applications:	ELISA, IF, IHC, WB (Based on references)
Application Note:	Anti-COLLAGEN Type I Antibody Biotin Conjugated has been tested by dot blot and Flow Cytometry and 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:	User Optimized
IHC:	1:50 - 1:200
IP:	1:100
WB:	1:3,000 - 1:6,000

Formulation

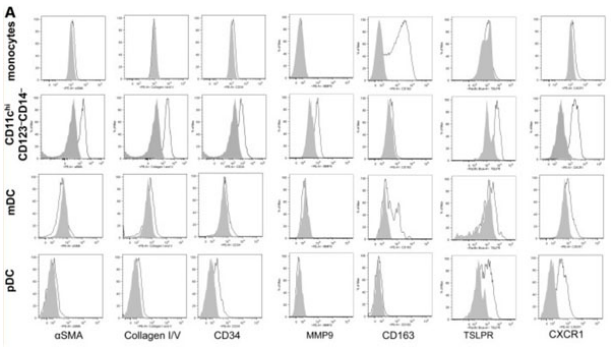
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

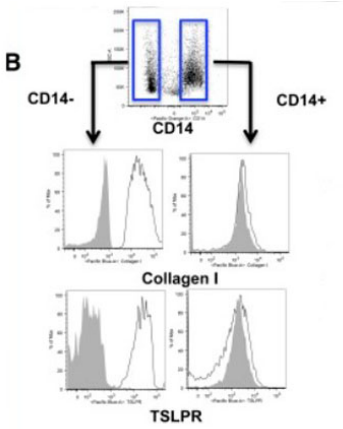
Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Restore with 0.1 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

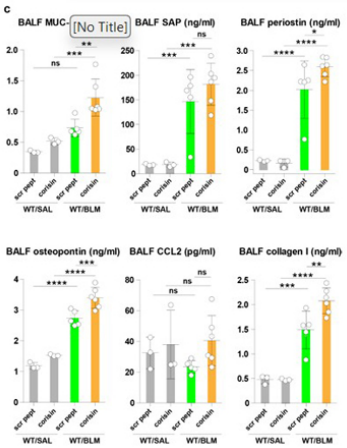


Flow Cytometry
Flow cytometry of Anti-Collagen Type I Antibody Biotin Conjugated.
Expanded CD11chiCD123–CD14– cells are fibrocytes that mediate angiogenesis. (A) Using the same gating strategy as shown in Figure 1A, CD11chiCD123–CD14– cells from a representative subject sample were analyzed for cell surface phenotype. The shaded areas represent background fluorescence on the designated population as indicated by FMO controls. This is representative of more than 10 experiments. Figure 2. PMID: 23757729.



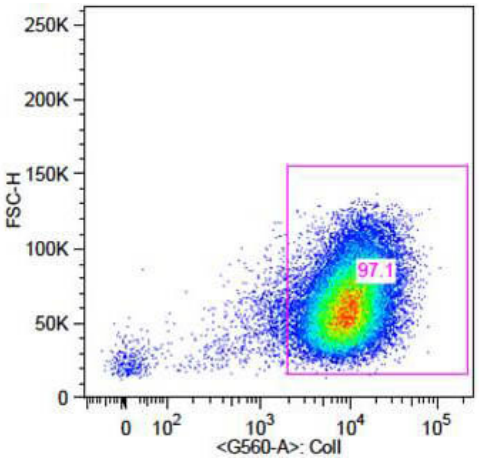
Flow Cytometry

Flow Cytometry of Anti-Collagen Type I Antibody Biotin Conjugated.
IL-4 induces monocytes to differentiate into CD14– fibrocytes that are readily distinguished from CD14+ macrophages in the same culture. (B) Cell surface phenotype of IL-4–differentiated adherent cells identifies 2 subsets based on CD14 expression, which further shows differential expression of collagen and TSLPR. FMO controls on gated CD14+ vs CD14– populations are shown by shaded gray histograms. This is representative of more than 5 experiments from 5 separate healthy donors. Figure 5. PMID: 23757729.



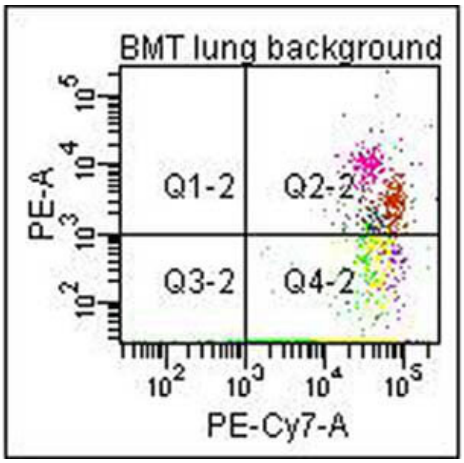
ELISA

c) The BALF levels of serum amyloid P component (SAP), MUC-1, chemokine (C-C motif) ligand 2 (CCL2), periostin, collagen I, and osteopontin were measured by enzyme immunoassays following the manufacturer's instructions. The number of mice: n=3 in WT/SAL/scr pept and WT/SAL/corisin groups, n=5 in WT/BLM/scr pept, and n=6 in WT/BLM/corisin group. Data are the mean ± S.D. Statistical analysis by ANOVA with a post hoc Newman-Keuls test. *p<0.05; **p<0.01; ***p<0.001; ****p<0.0001. ns, not significant. SF22. PMID: 35322016



Flow Cytometry

Flow Cytometry of Rabbit Anti-Collagen 1 Antibody. Cells: primary adult human dermal fibroblast cells. Stimulation: none. Primary antibody: Biotin-Conjugated Collagen 1 antibody (600-406-103) at 5µg/mL for 45 min at 4°C. Secondary antibody: Rabbit Streptavidin, R-PE antibody at 1:500 for 15 min at RT. Courtesy of D. Figueroa NIH.



Flow Cytometry
Flow Cytometry of Anti-Collagen Type I Biotin Conjugated Antibody (600-406-103). Showing a 7.4% of fibrocyte population in the mouse lung using CD45 and Col 1A1 double positive markers. In the experiment, we used Biotinated Collagen Type 1 (p/n 600-406-103) in combination with a PE-conjugated secondary antibody for flow cytometric analysis. Courtesy of Walden Ai, PhD, Univ of SC School of Medicine.

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