

Datasheet for 600-406-107**Collagen Type V Antibody Biotin Conjugated****Overview**

Description:	Anti-Collagen Type V (RABBIT) Antibody Biotin Conjugated - 600-406-107
Item No.:	600-406-107
Size:	100 µg
Applications:	FC
Reactivity:	Human, Bovine
Host Species:	Rabbit

Product Details

Background:	In muscle tissue, collagen serves as a major component of the endomysium. Collagen constitutes one to two percent of muscle tissue, and accounts for 6% of the weight of strong, tendinous muscles. A collagen may be defined as a protein containing sizable domain(s) of triple-helical conformation. Type IV collagen is a major macromolecular constituent of basement membranes and can be readily isolated from basement-membrane-rich tissues or highly vascularized tissues such as the placental villi. This collagen appears to be largely restricted to structures identifiable as basement membranes. In contrast, type VI collagen appears to be prevalent in several tissues even though it has been isolated largely from placental villi preparations. The extent to which type VII and VIII collagens are distributed is not known.
Synonyms:	rabbit anti-Collagen Type V antibody biotin conjugation, biotin conjugated rabbit anti-Collagen Type V antibody, COL5A1 protein antibody, Collagen fetal membrane A polypeptide antibody, Collagen alpha-1 (V) chain
Host Species:	Rabbit
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	COL5A1-COL5A3
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Reactivity:	Human, Bovine
Immunogen Type:	Native Protein
Immunogen:	Collagen Type V from human and bovine placenta
Purity/Specificity:	This product has been prepared by immunoaffinity chromatography using immobilized antigens followed by extensive cross-adsorption against other collagens, human serum proteins and non-collagen extracellular matrix proteins to remove any unwanted specificities. 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 V collagens and has negligible cross-reactivity with Type I, II, III, IV and VI collagens. Non-specific cross reaction of anti-collagen antibodies with other human serum proteins or non-collagen extracellular matrix proteins is negligible.
Relevant Links:	• NCBI - NP_056534.2 • UniProtKB - P25940 • GeneID - 50509

Application Details

Suggested Applications:	FC (Based on references)
Application Note:	This product was assayed by immunoblot and found to be reactive against Collagen V at a dilution of 1:5,000 to 1:10,000. This product was also assayed against 1.0 ug of Collagen V in a standard sandwich ELISA using Peroxidase Conjugated Streptavidin #S000-03 and ABTS (2,2'-azino-bis-[3-ethylbenzothiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:4,000 to 1:8,000 of the stock concentration is suggested for this product. For immunohistochemistry on frozen tissue sections dilute the product 1:50 to 1:200.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:4,000 to 1:8,000
IHC:	1:50 to 1:200
IP:	1:100
WB:	1:5,000 to 1:10,000

Formulation

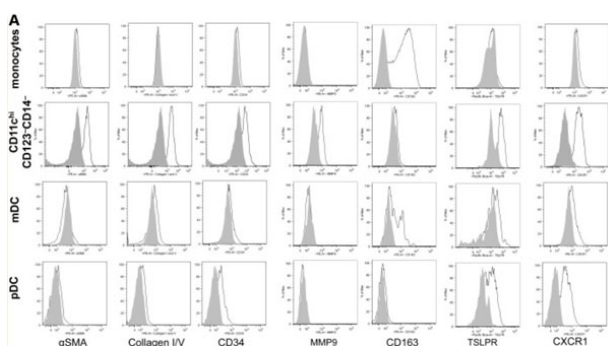
Physical State:	Liquid (sterile filtered)
Concentration:	1.1 mg/mL by UV absorbance at 280 nm

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

Shipping & Handling

Shipping Condition:	Wet Ice
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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Flow Cytometry

Flow Cytometry of Anti-Collagen Type V 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.

References

- Zhang H et al. Fibrocytes represent a novel MDSC subset circulating in patients with metastatic cancer. *Blood* (2013)

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.