Datasheet for ABIN5596841

anti-Collagen Type V antibody (Biotin)

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Overview

Quantity:	100 µg
Target:	Collagen Type V (COL5)
Reactivity:	Human, Cow, Mammalian
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Collagen Type V antibody is conjugated to Biotin
Application:	ELISA, Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP)

Product Details

Immunogen:	Immunogen: Collagen Type V from human and bovine placenta Immunogen Type: Native Protein
Isotype:	IgG
Cross-Reactivity (Details):	Typically negligible cross reactivity against other types of collagens was detected by ELISA against purified standards. 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.
Purification:	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.

Target Details

Target:	Collagen Type V (COL5)
Alternative Name:	Collagen Type V (COL5 Products)
Background:	Synonyms: COL5A2 protein antibody, Col5A3 antibody, Collagen fetal membrane A polypeptide antibody 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. Gene Name: COL5A1
Gene ID:	50509
UniProt:	P25940

Application Details

Application Notes:	Immunohistochemistry Dilution: 1:50 to 1:200 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 µg of Collagen V in a standard sandwich ELISA using Peroxidase Conjugated Streptavidin #S000-03 and ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-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. 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 µg of Collagen V in a standard sandwich ELISA using Peroxidase Conjugated Streptavidin #S000-03 and ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-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. Western Blot Dilution: 1:5,000 to 1:10,000

Application Details

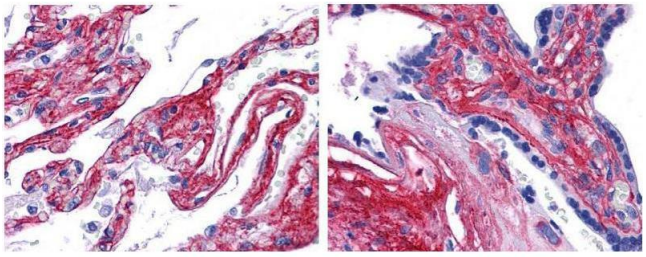
	Immunoprecipitation Dilution: 1:100 ELISA Dilution: 1:4,000 to 1:8,000
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitution Volume: 100 µL Reconstitution Buffer: Restore with deionized water (or equivalent)
Concentration:	1.1 mg/mL
Buffer:	Buffer: 0.125 M Sodium Borate, 0.075 M Sodium Chloride, 0.005 M EDTA, pH 8.0 Stabilizer: 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	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 date is one (1) year from date of restoration.
Expiry Date:	12 months

Publications

Product cited in:	Zhang, Maric, DiPrima, Khan, Orentas, Kaplan, Mackall: "Fibrocytes represent a novel MDSC subset circulating in patients with metastatic cancer." in: **Blood**, Vol. 122, Issue 7, pp. 1105-13, (2013) (PubMed).



Immunohistochemistry

Image 1. anti collagen V antibody (600-401-107 Lot 22063, 1:200, 45 min RT) showed strong staining in FFPE sections of human lung (left) with strong staining within alveoli, vessels, and in connective tissue spaces; and placenta (right) with strong staining observed in stromal and connective tissue spaces and vessel walls. Slides were steamed in 0.01 M sodium citrate buffer, pH 6.0 at 99-100°C - 20 minutes for antigen retrieval. Images provided courtesy of LifeSpan Biosciences, Seattle, WA

