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Product datasheet for R1042B

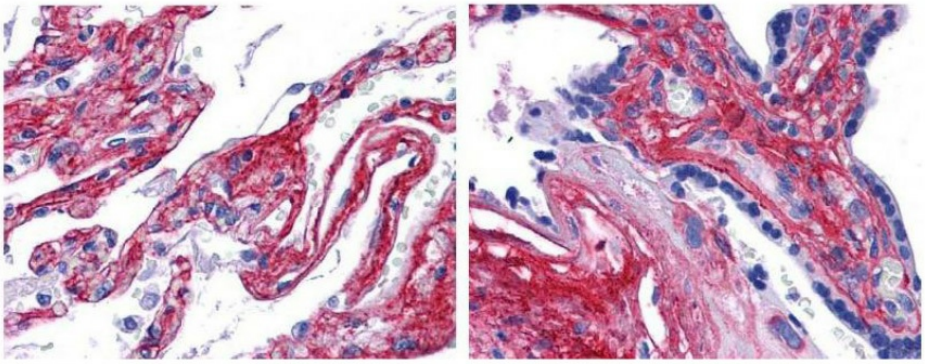
Collagen V (COL5A1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IHC, IP, WB
Recommended Dilution:	Anti-Collagen antibodies have been used for indirect trapping ELISA for quantitation of antigen in serum using a standard curve, for Immunoprecipitation and for western blotting for highly sensitive qualitative analysis. ***Recommended Dilutions***: **ELISA:** 1/4,000-1/8,000. **Western Blot:** 1/5,000-1/10,000. **Immunohistochemistry:** 1/50-1/200. ***Note:*** This product was assayed by immunoblot and found to be reactive against Collagen V at a dilution of 1/5,000-1/10,000. This product was also assayed against 1.0 µg of Collagen V in a standard Sandwich ELISA using Peroxidase Conjugated Streptavidin and ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-6-sulfonic acid]) 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 1/50-1/200.
Reactivity:	Bovine, Human, Mammalian
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Collagen Type V from Human and Bovine placenta.
Specificity:	Typically less than 1% 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.

Formulation:	0.125M Sodium Borate, 0.075M Sodium Chloride, 0.005M EDTA, pH 8.0 Label: Biotin State: Liquid (sterile filtered) purified Ig fraction Stabilizer: 10 mg/ml BSA (IgG and Protease free) Preservative: 0.01% Sodium Azide Label: Biotinamidocaproate N-Hydroxysuccinimide Ester (BAC) Molar radio: 10-20 BAC molecules per Rabbit IgG molecule.
Reconstitution Method:	Restore with 1.0 ml deionized water (or equivalent)
Concentration:	lot specific
Purification:	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
Conjugation:	Biotin
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	collagen type V alpha 1
Database Link:	Entrez Gene 1289 Human P20908
Background:	Type V Collagen is a member of group I Collagen (fibrillar forming collagen). It is a minor connective tissue component of nearly ubiquitous distribution. Type V Collagen binds to DNA, heparan sulfate, Thrombospondin, Heparin, and Insulin. Collagen V is composed of several subunits as follows: trimers of two alpha 1(V) and one alpha 2(V) chains in most tissues and trimers of one alpha 1(V), one alpha 2(V), and one alpha 3(V) chains in placenta. Type V Collagen is closely related to type XI Collagen and it is possible that the Collagen chains of types V and XI constitute a single collagen type with tissue specific chain combinations. Mutations in this gene are associated with Ehlers Danlos syndrome, types I and II.
Synonyms:	COL5A1
Protein Families:	Druggable Genome
Protein Pathways:	ECM-receptor interaction, Focal adhesion

Product images:



Anti-Collagen type V Antibody (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