

Product datasheet for R1042

Collagen V (COL5A1) Rabbit Polyclonal Antibody

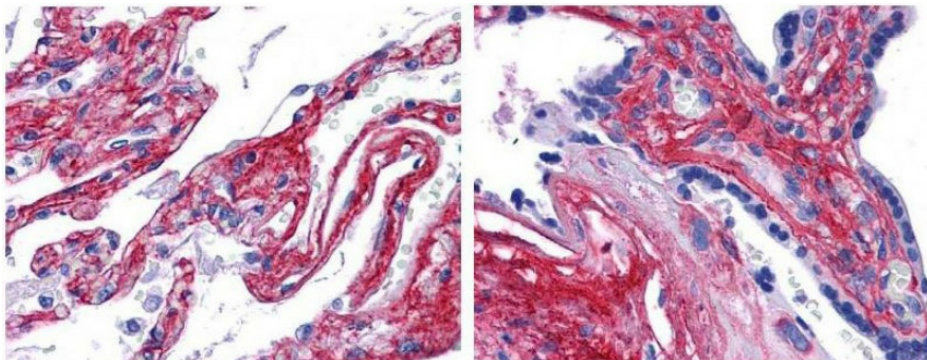
Product data:

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 (1/100) and for native (non-denaturing, non-dissociating) PAGE and Western blotting for highly sensitive qualitative analysis. Recommended Dilutions: 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 Affinity Purified anti-Rabbit IgG [H&L] (Goat) and (ABTS (2,2'-azino-bis-[3-ethylbenthiiazoline-6-sulfonic acid]) as a substrate for 30 minutes at RT. A working dilution of 1/4,000-1/8,000 of the stock concentration is suggested for this product. Immunohistochemistry on Frozen Tissue Sections: 1/50-1/200. Immuoprecipitation: 1/100. Western blot: 1/1,000-1/10,000. ELISA: 1/5,000-1/50,000.
Reactivity:	Bovine, Human, Mammalian
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Collagen type V purified 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 or VI collagens. Non-specific cross reaction of anti-collagen antibodies with other human serum proteins or non-collagen extracellular matrix proteins is negligible.



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Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 State: Purified State: Liquid (sterile filtered) purified Ig fraction Stabilizer: None Preservative: 0.01% (w/v) Sodium Azide
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:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Dilute only prior to immediate use. 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:	Collagens are highly conserved throughout evolution and are characterized by an uninterrupted "Glycine-X-Y" triplet repeat that is a necessary part of the triple helical structure. For these reasons it is often extremely difficult to generate antibodies with specificities to collagens. The development of type specific antibodies is dependent on NON-DENATURED three-dimensional epitopes. Extensively purified collagens are used for immunization from human and bovine placenta and cartilage by limited pepsin digestion and selective salt precipitation. This preparation results in a native conformation of the protein. Antibodies are isolated from rabbit antiserum and are extensively cross-adsorbed by immunoaffinity purification to produce 'type' specific antibodies. Greatly diminished reactivity and selectivity of these antibodies will result if denaturing and reducing conditions of SDS-PAGE and immunoblotting are used.
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