

COL1A1 Recombinant Antibody [PSH06-20] - Rat IgG1 (Chimeric)

HA601656



Product Type:	Recombinant Chimeric Antibody IgG, primary antibodies
Species reactivity:	Human
Applications:	mIHC
Molecular Wt:	Predicted band size: 139 kDa
Clone number:	PSH06-20

Description: Collagen, type I, alpha 1, also known as alpha-1 type I collagen, is a protein that in humans is encoded by the COL1A1 gene. COL1A1 encodes the major component of type I collagen, the fibrillar collagen found in most connective tissues, including cartilage. Collagen is a protein that strengthens and supports many tissues in the body, including cartilage, bone, tendon, skin and the white part of the eye (sclera). The COL1A1 gene produces a component of type I collagen, called the pro-alpha1(I) chain. This chain combines with another pro-alpha1(I) chain and also with a pro-alpha2(I) chain (produced by the COL1A2 gene) to make a molecule of type I procollagen. These triple-stranded, rope-like procollagen molecules must be processed by enzymes outside the cell. Once these molecules are processed, they arrange themselves into long, thin fibrils that cross-link to one another in the spaces around cells. The cross-links result in the formation of very strong mature type I collagen fibers. Collagenous function includes rigidity and elasticity.

Immunogen: Synthetic peptide within Human COL1A1 aa 1,197-1,208.

Positive control: Human tonsil tissue.

Subcellular location: Secreted.

Database links: SwissProt: P02452 Human

Recommended Dilutions:
mIHC 1:5,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders: 0086-571-88062880

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Applications: WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

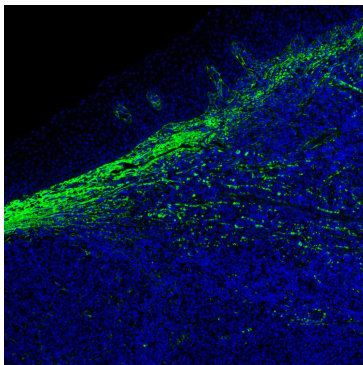


Fig1: mlHC analysis of human tonsil tissue (Formalin/PFA-fixed paraffin-embedded sections) with Rat anti-COL1A1 antibody at 1/5,000 dilution. The immunostaining was performed with the IRISKitCmTSA Kit (900810). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95°C. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

Note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

Background References

1. Liu Q et al. COL1A1-positive endothelial cells promote gastric cancer progression via the ANGPTL4-SDC4 axis driven by endothelial-to-mesenchymal transition. *Cancer Lett.* 2025 Jul
2. Saito M et al. Is COL1A1 Gene rs1107946 Polymorphism Associated with Sport Climbing Status and Flexibility? *Genes (Basel).* 2022 Feb

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