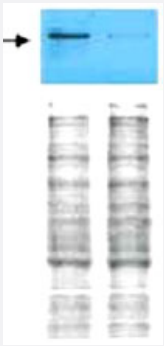
Collagen Type I polyclonal antibody

Catalog # PAB10190 Size 100 ug

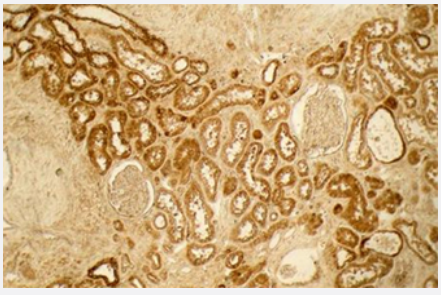
Applications

Western Blot (Transfected lysate)



Western blot analysis is shown using Collagen Type I polyclonal antibody (Cat # PAB10190) to detect expression of collagen I in Wistar rat hepatic stellate cells (HSC) in control (GFP-transduced) (left lane) and PPARgamma-transduced cell lysates (right lane).
Protein staining shown below each blot depicts equal protein loading.
An equal amount of the whole cell protein (100 ug) was separated by SDS-PAGE and electroblotted to nitro-cellulose membranes.
Proteins were detected by incubating the membrane with Collagen Type I polyclonal antibody at a concentration of 0.2-2 ug/10 mL in TBS (100 mM Tris-HCl, 0.15 M NaCl, pH 7.4) with 5% Non-fat milk.
Detection occurred by incubation with a horseradish peroxidase-conjugated secondary antibody at 1 ug/10 ml.
Proteins were detected by a chemiluminescent method using the PIERCE ECL kit (Amersham Biosciences).
See Hazra et al. (2004) for additional details.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)



Immunohistochemical staining with Collagen Type I polyclonal antibody (Cat # PAB10190) was used at a 1 : 100 dilution to detect distal tubules in normal kidney tissue. Note the absence of staining of glomeruli. The antibody was reacted with antibody for 4 hours at room temperature followed by the addition of secondary antibody and substrate reaction. Tissue was formalin-fixed and paraffin embedded. No antigen retrieval was performed.
Personal Communication, Tina Roush, LifeSpanBiosciences, Seattle, WA.

Specification

Product Description	Rabbit polyclonal antibody raised against native Collagen Type I.
Immunogen	Native purified human and bovine placenta Collagen Type I.
Host	Rabbit
Reactivity	Bovine, Human
Specificity	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 I collagens and has negligible cross-reactivity with Type II, III, IV, V or VI collagens. Non-specific cross-reaction of anti-collagen antibodies with other human serum proteins or non-collagen extracellular matrix proteins is negligible.
Form	Liquid
Purification	This ab 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.
Recommend Usage	ELISA (1:5000-1:50000) FLISA (1:100) Immunohistochemistry (1:50-1:200) Immunoprecipitation (1:100) Western Blot (1:1000-1:10000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 0.02 M potassium phosphate, 0.15 M sodium chloride, pH 7.2 (0.01% sodium azide).
Storage Instruction	Storeat 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. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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- Immunoprecipitation

- Enzyme-linked Immunoabsorbent Assay

- Fluorescence-linked Immunosorbent Assay

Publication Reference

- Pore size modulates in vitro osteogenesis of bone marrow mesenchymal stem cells in fibronectin/gelatin coated silk fibroin scaffolds.

  Chengchong Ai, Ling Liu, James Cho-Hong Goh.

  Materials science & Engineering. C, Materials for Biological Applications 2021 May; 124:112088.

  Application: IHC-P, Pig, Pig bone marrow mesenchymal stem cells, Pig cell-seeded scaffolds

- Adipogenic transcriptional regulation of hepatic stellate cells.

  She H, Xiong S, Hazra S, Tsukamoto H.

  The Journal of Biological Chemistry 2005 Feb; 280(6):4959.

  Application: WB-Ce, Rat, HSC cells

- Bone marrow-derived progenitor cells in pulmonary fibrosis.

  Hashimoto N, Jin H, Liu T, Chensue SW, Phan SH.

  The Journal of Clinical Investigation 2004 Jan; 113(2):243.

  Application: Flow Cyt, IF, Mouse , Mouse fibroblasts, Whole-lung cells

- Peroxisome proliferator-activated receptor gamma induces a phenotypic switch from activated to quiescent hepatic stellate cells.

  Hazra S, Xiong S, Wang J, Rippe RA, Krishna V, Chatterjee K, Tsukamoto H.

  The Journal of Biological Chemistry 2004 Mar; 279(12):11392.

  Application: WB, Human, Hepatic stellate cells