

For Research Use Only

Collagen Type III (N-terminal) Polyclonal antibody



Catalog Number: 22734-1-AP

Featured Product

381 Publications

Basic Information

Catalog Number:

22734-1-AP

Size:

150ul, Concentration: 900 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG18658

GenBank Accession Number:

BC028178

GeneID (NCBI):

1281

UNIPROT ID:

P02461

Full Name:

collagen, type III, alpha 1

Calculated MW:

1466 aa, 139 kDa

Observed MW:

140-180 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:300-1:1000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:500-1:2000

IF 1:50-1:500

Applications

Tested Applications:

WB, IP, IF, IHC, ELISA

Cited Applications:

WB, IF, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, chicken, rat, mouse, rabbit, hamster, pig, canine

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse skin tissue, rat skin tissue

IP : mouse skin tissue,

IHC : human hepatocirrhosis tissue, human pancreas cancer tissue, mouse liver tissue, mouse kidney tissue, human colon tissue, human skin cancer tissue, mouse heart tissue, mouse colon tissue, human skin tissue, human malignant melanoma tissue

IF : human colon tissue, mouse colon tissue

Background Information

Type III collagen is a fibrillar forming collagen comprising three $\alpha 1(\text{III})$ chains and is expressed in early embryos and throughout embryogenesis (PMID: 9050868). In the adult, type III collagen is a major component of the extracellular matrix in a variety of internal organs and skin. It occurs in most soft connective tissues along with type I collagen (PMID: 2445760). COL3A1 gene encodes type III procollagen. Mutations in this gene are associated with Ehlers-Danlos syndrome types IV, and with aortic and arterial aneurysms (PMID: 10706896; 2243125; 18389341). This antibody raised against 24-152 aa of prepro $\alpha 1(\text{III})$ chain of human type III procollagen detects type III procollagen at 140-180 kDa and also in some lysates reveals a 70-kDa band which has been reported and may represent a cleaved form of type III procollagen (PMID: 17424834; 19648160; 22802960).

Notable Publications

Author	Pubmed ID	Journal	Application
Lexun Wang	34621323	Evid Based Complement Alternat Med	WB
Dandan Zhang	36225554	Front Pharmacol	WB
Yu Sun	34562065	J Cell Mol Med	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

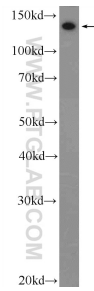
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

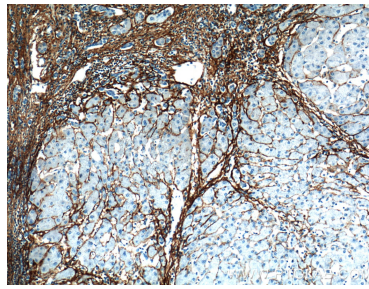
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

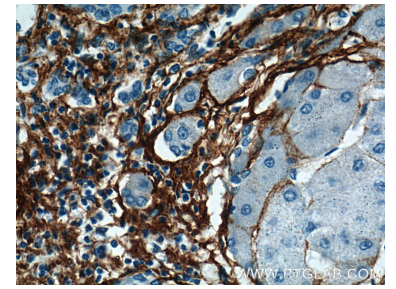
Selected Validation Data



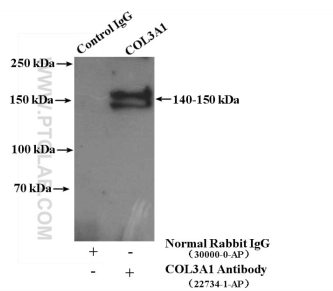
mouse skin tissue were subjected to SDS PAGE followed by western blot with 22734-1-AP (Collagen Type III (N-terminal) antibody at dilution of 1:1000 incubated at room temperature for 1.5 hours.



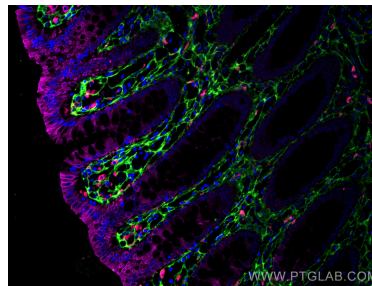
Immunohistochemical analysis of paraffin-embedded human hepatocirrhosis tissue slide using 22734-1-AP (Collagen Type III (N-terminal) antibody at dilution of 1:1000 (under 10x lens).



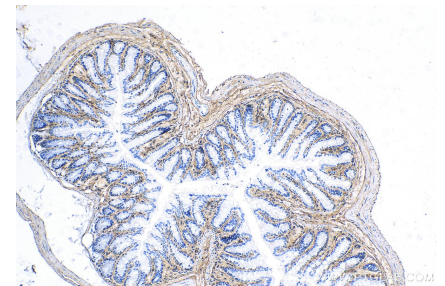
Immunohistochemical analysis of paraffin-embedded human hepatocirrhosis tissue slide using 22734-1-AP (Collagen Type III (N-terminal) antibody at dilution of 1:1000 (under 40x lens).



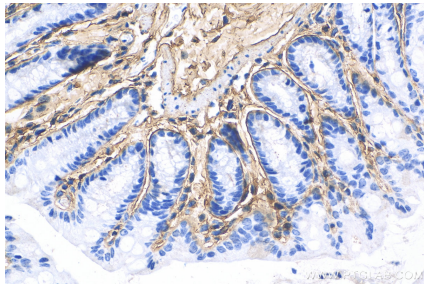
IP result of anti-Collagen Type III (N-terminal) (IP:22734-1-AP, 4ug; Detection:22734-1-AP 1:500) with mouse skin tissue lysate 3200ug.



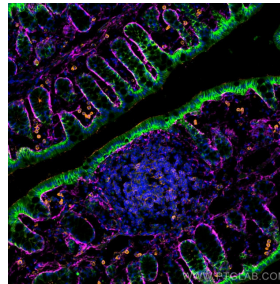
Immunofluorescent analysis of (4% PFA) fixed human colon tissue using Collagen Type III (N-terminal) antibody (22734-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), Cytokeratin 20 antibody (60183-1-Ig, Clone: 4D10A4, Magenta), CoraLite@594 CD68 antibody (CL594-25747, red).



Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 22734-1-AP (Collagen Type III (N-terminal) antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 22734-1-AP (Collagen Type III (N-terminal) antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescence of mouse colon: Frozen OCT-embedded mouse colon sections were stained with anti-E-cadherin antibody (20874-1-AP) labeled with CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2, green) in the first step, anti-CD45 antibody (80297-1-RR) labeled with FlexAble CoraLite Plus 555 Kit (KFA002, orange) in the second step, anti-Collagen Type III antibody (22734-1-AP) labeled with FlexAble CoraLite647 Kit (KFA003, magenta) in the