

For Research Use Only

# Collagen Type III (N-terminal) Recombinant antibody

Catalog Number: 80009-1-RR



## Basic Information

<b>Catalog Number:</b> 80009-1-RR	<b>GenBank Accession Number:</b> BC028178	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 750 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1281	<b>CloneNo.:</b> 201
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P02461	<b>Recommended Dilutions:</b> IHC 1:2000-1:8000 IF-P 1:50-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> collagen, type III, alpha 1	
<b>Immunogen Catalog Number:</b> AG18658	<b>Calculated MW:</b> 1466 aa, 139 kDa	

## Applications

### Tested Applications:

IHC, IF-P, ELISA

### Species Specificity:

human

**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:

**IHC :** human colon tissue, human colon cancer tissue, human ovary tumor tissue, human pancreas cancer tissue, human skin cancer tissue

**IF-P :** human 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 was raised against 24-152 aa of prepro  $\alpha 1(\text{III})$  chain of human type III procollagen. It can't recognize mouse or rat type III collagen.

## 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

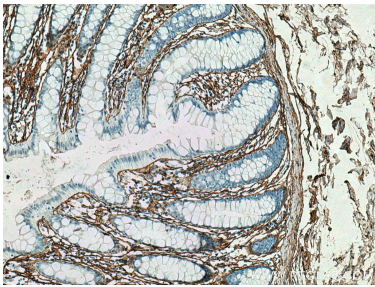
For technical support and original validation data for this product please contact:

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

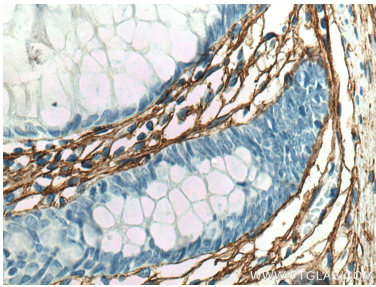
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

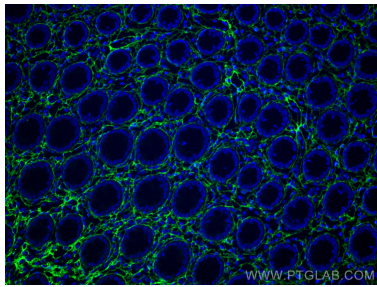
Selected Validation Data



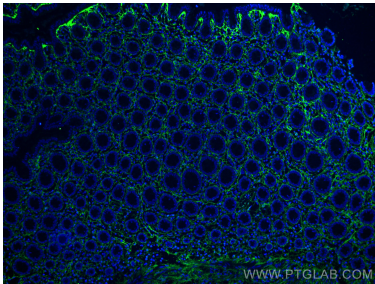
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 80009-1-RR (COL3A1 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



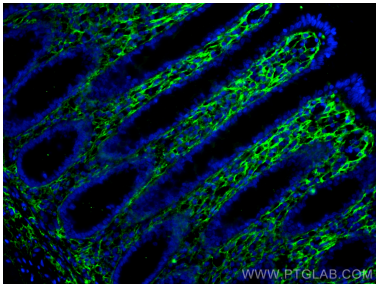
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 80009-1-RR (COL3A1 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



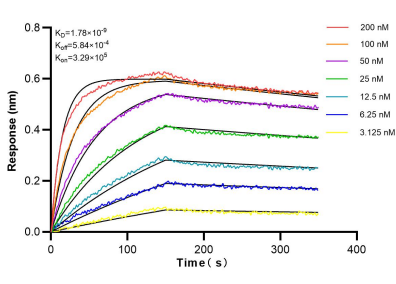
Immunofluorescent analysis of (4% PFA) fixed human colon tissue using Collagen Type III (N-terminal) antibody (80009-1-RR, Clone: 2O1) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed human colon tissue using Collagen Type III (N-terminal) antibody (80009-1-RR, Clone: 2O1) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human colon tissue using Collagen Type III (N-terminal) antibody (80009-1-RR, Clone: 2O1) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Bi-layer interferometry (BLI) kinetic assays of 80009-1-RR against Human Collagen Type III (N-terminal) were performed. The affinity constant is 1.78 nM.