

## Collagen Type I Recombinant antibody

Catalog Number: 86093-1-RR

## Basic Information

Catalog Number:

86093-1-RR

Concentration:

1000 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG27389

GenBank Accession Number:

BC036531

GeneID (NCBI):

1277

UNIPROT ID:

P02452

Full Name:

collagen, type I, alpha 1

Calculated MW:

1464 aa, 139 kDa

Observed MW:

140 kDa, 200kDa

Purification Method:

Protein A purification

CloneNo.:

25053481

Recommended Dilutions:

WB: 1:1000-1:4000

IHC: 1:400-1:1600

## Applications

Tested Applications:

WB, IHC, ELISA

Species Specificity:

human

Positive Controls:

WB: SK-N-SH cells,

IHC: human colon tissue, human colon cancer tissue

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

## Background Information

Type I collagen, the major structural component of connective tissues such as skin, tendon and bone, is the most abundant and widely expressed collagen in humans (PMID: 7620364; 8645190; 9016532). Type I collagen is a heterotrimer comprising one alpha 2(I) and two alpha 1(I) chains which are encoded by the unlinked loci COL1A2 and COL1A1 respectively. Mutations in COL1A1 are associated with osteogenesis imperfecta types I-IV, Ehlers-Danlos syndrome type VIIA, Ehlers-Danlos syndrome Classical type, Caffey Disease and idiopathic osteoporosis. This antibody raised against a synthesized peptide corresponding to 1206-1218 aa of human pro-alpha 1 chain of type I collagen recognize collagen alpha-1(I) chain. The presence of unprocessed, intermediate, and mature chains of type I collagen was clearly detected only in static constructs. Indeed, in sponges cultured under perfusion the presence of type I collagen was mainly restricted to mature chains, suggesting that HACs were no longer actively producing type I collagen (PMID: 27584727). It is reported that the molecular weight is 200kDa (PMID: 28526934).

## Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

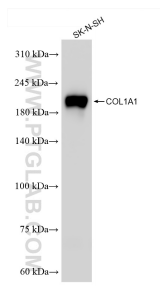
T: 4006900926

E: Proteintech-CN@ptglab.com

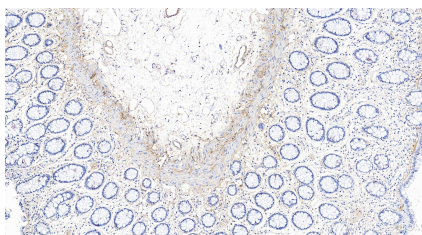
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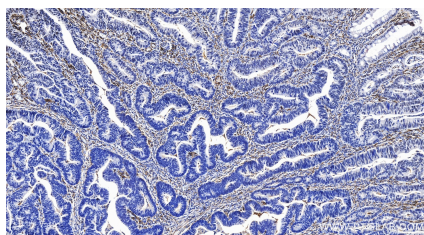
## Selected Validation Data



SK-N-SH cells were subjected to SDS PAGE followed by western blot with 86093-1-RR (COL1A1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 86093-1-RR (COL1A1 antibody) at dilution of 1:800 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 86093-1-RR (COL1A1 antibody) at dilution of 1:800 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).