

For Research Use Only

# Collagen Type I Recombinant antibody, PBS Only

Catalog Number: 86093-1-PBS



## Basic Information

<b>Catalog Number:</b> 86093-1-PBS	<b>GenBank Accession Number:</b> BC036531	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1277	<b>CloneNo.:</b> 25053481
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P02452	
<b>Isotype:</b> IgG	<b>Full Name:</b> collagen, type I, alpha 1	
<b>Immunogen Catalog Number:</b> AG27389	<b>Calculated MW:</b> 1464 aa, 139 kDa	
	<b>Observed MW:</b> 140 kDa, 200kDa	

## Applications

**Tested Applications:**  
WB, IHC, Indirect ELISA

**Species Specificity:**  
human

## 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

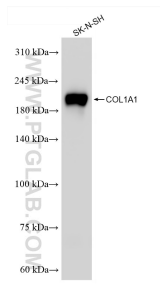
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

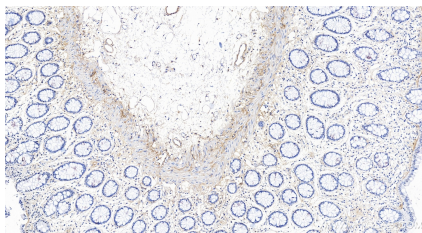
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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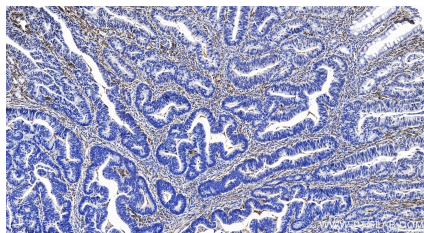
## Selected Validation Data



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. This data was developed using the same antibody clone with 86093-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 86093-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 86093-1-PBS in a different storage buffer formulation.