

Collagen Type I Monoclonal antibody

Catalog Number: 67288-1-Ig 221 Publications

Basic Information

Catalog Number: 67288-1-Ig	GenBank Accession Number: NM_000088	Purification Method: Protein A purification
Size: 150ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 1277	CloneNo.: 1E9A7
Source: Mouse	UNIPROT ID: P02452	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:2500-1:10000 IF-P 1:200-1:800
Isotype: IgG1	Full Name: collagen, type I, alpha 1	
	Calculated MW: 139 kDa	
	Observed MW: 120-130 kDa	

Applications

Tested Applications: WB, IHC, IF-P, ELISA	Positive Controls:
Cited Applications: WB, IHC, IF, ColP	WB : pig colon tissue, human cervical cancer tissue, human placenta tissue, pig lung tissue, pig skin tissue
Species Specificity: human, pig	IHC : human breast cancer tissue, human colon tissue, human colon cancer tissue
Cited Species: human, pig, rabbit, zebrafish	IF-P : 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).

Notable Publications

Author	Pubmed ID	Journal	Application
Siyuan Dong	33062455	PeerJ	IHC
Fei Yao	36163271	Inflamm Regen	WB
Xia Niu	34681175	Pharmaceuticals (Basel)	WB

Storage

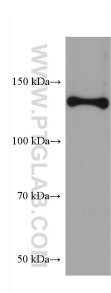
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

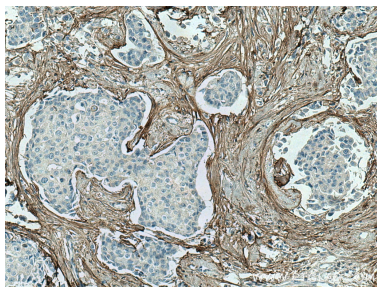
For technical support and original validation data for this product please contact:
 T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
 E: proteintech@ptglab.com
 W: ptglab.com

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

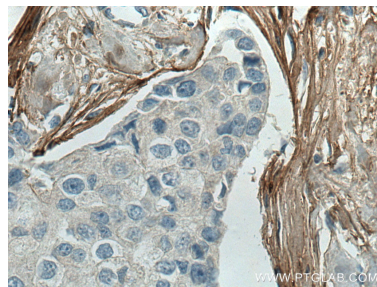
Selected Validation Data



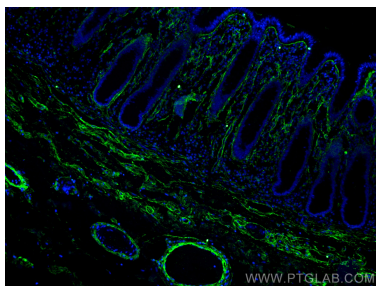
pig colon tissue were subjected to SDS PAGE followed by western blot with 67288-1-Ig (Collagen Type I antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



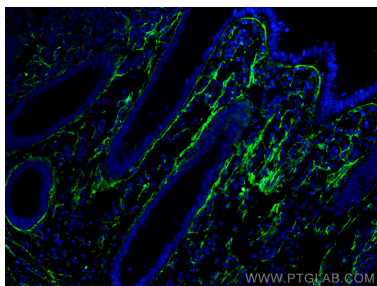
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67288-1-Ig (Collagen Type I antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



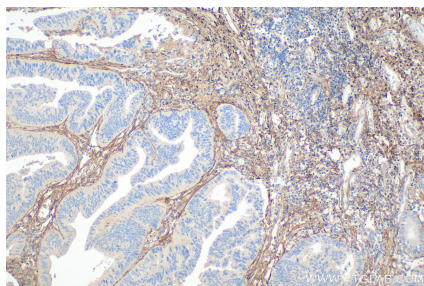
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67288-1-Ig (Collagen Type I antibody) at dilution of 1:5000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human colon cancer tissue using Collagen Type I antibody (67288-1-Ig, Clone: 1E9A7) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed human colon cancer tissue using Collagen Type I antibody (67288-1-Ig, Clone: 1E9A7) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 67288-1-Ig (Collagen Type I antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).