For Research Use Only

Collagen Type I Monoclonal antibody

Catalog Number:67288-1-Ig 126 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
67288-1-Ig

Size:
150ul , Concentration: 1000 μg/ml by Nanodrop;

Source:
Mouse

Isotype:
IgG1

GenBank Accession Number:
NM_000088

GeneID (NCBI):
1277

UNIPROT ID:
P02452

Full Name:
collagen, type I, alpha 1

Calculated MW:
139 kDa

Observed MW:
120-130 kDa

Purification Method:
Protein G purification

CloneNo.:
1E9A7

Recommended Dilutions:
WB 1:5000-1:50000
IHC 1:2500-1:10000
IF 1:200-1:800

Applications

Tested Applications:
WB, IF, IHC, ELISA

Cited Applications:
WB, IF, IHC

Species Specificity:
Human, pig

Cited Species:
human, rabbit

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 : pig colon tissue, human cervical cancer tissue, human placenta tissue, pig lung tissue, pig skin tissue

IHC : human breast cancer tissue, human colon cancer tissue, human colon tissue

IF : human colon cancer tissue,

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

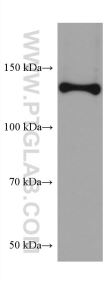
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

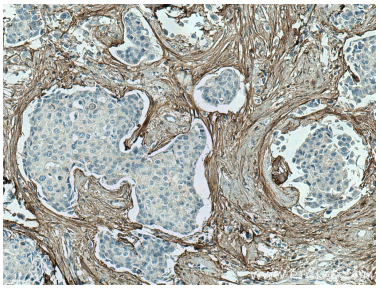
*** 20ul sizes contain 0.1%BSA

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

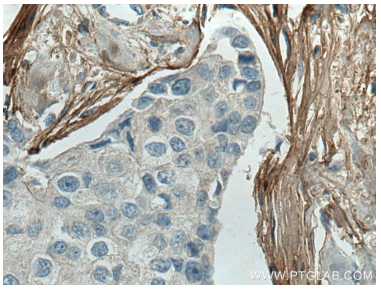
Selected Validation Data



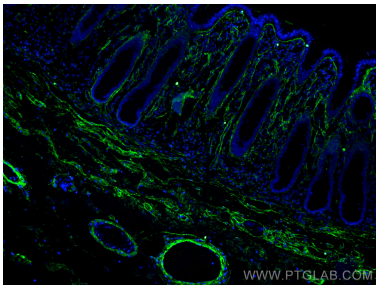
pig colon tissue were subjected to SDS PAGE followed by western blot with 67288-1-Ig (Collagen Type I antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



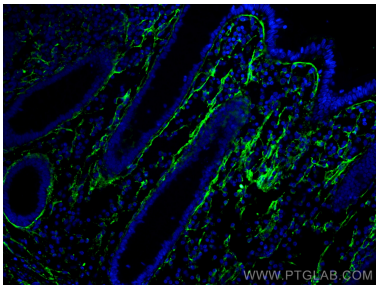
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67288-1-Ig (Collagen Type I antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).