For Research Use Only

Collagen Type I Monoclonal antibody, PBS Only

Catalog Number: 67288-1-PBS



Basic Information

Catalog Number: 67288-1-PBS Concentration: 1000 μg/ml Source:

Mouse Isotype:

lgG1

GenBank Accession Number:

NM 000088 GeneID (NCBI): **UNIPROT ID:**

Full Name: collagen, type I, alpha 1

P02452

Calculated MW: 139 kDa Observed MW:

120-130 kDa

Purification Method:

Protein A purification CloneNo.:

1E9A7

Applications

Tested Applications: WB, IHC, IF-P, Indirect ELISA Species Specificity:

human, pig

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).

Storage

Storage:

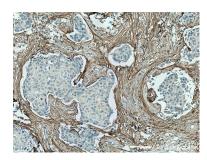
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer:

PBS Only

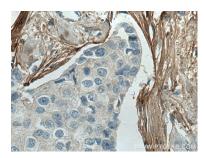
Selected Validation Data



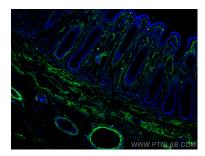
pig colon tissue were subjected to SDS PAGE followed by western blot with 67288-1-1g (Collagen Type I antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 67288-1-PBS in a different storage buffer formulation



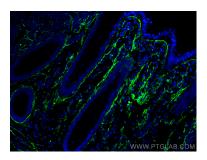
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 67288-1-Ig (Collagen Type I antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67288-1-PBS in a different storage buffer formulation.



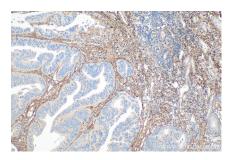
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 67288-1-Ig (Collagen Type I antibody) at dilution of 1:5000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67288-1-PBS in a different storage buffer formulation.



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 Affini Pure Goat Anti-Mouse IgC(H+L). This data was developed using the same antibody clone with 67288-1-PBS in a different storage buffer formulation.



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 Affini Pure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 67288-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded 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). This data was developed using the same antibody clone with 67288-1-PBS in a different storage buffer formulation.