For Research Use Only

Collagen Type I Recombinant antibody, PBS Only

Catalog Number:83752-5-PBS

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Basic Information

Catalog Number:
83752-5-PBS

Size:
1 mg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG6281

GenBank Accession Number:
BC054498

GeneID (NCBI):
1278

UNIPROT ID:
P08123

Full Name:
collagen, type I, alpha 2

Calculated MW:
1366 aa, 130 kDa

Observed MW:
120-130 kDa

Purification Method:
Protein A purfication

CloneNo.:
240665F8

Applications

Tested Applications:
IHC, IF/ICC, FC (Intra), ELISA

Species Specificity:
human, rat

Background Information

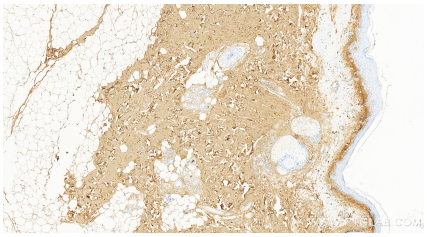
Type I collagen, the major structural component of connective tissues such as skin, tendon and bone, is the most abundant and widely expressed collagen in humans (PMID: 7620364; 8645190; 9016532). Type I collagen is a heterotrimer comprising one alpha 2(I) and two alpha 1(I) chains which are encoded by the unlinked loci COL1A2 and COL1A1 respectively. Type I collagen has a molecular mass of about 250-300 kDa, while the alpha 2(I) chain has a molecular weight of about 100-140 kDa. Mutations in COL1A2 gene are associated with osteogenesis imperfecta, Ehlers-Danlos syndrome, idiopathic osteoporosis, and atypical Marfan syndrome. This antibody raised against 1017-1366 aa of human pro-alpha 2 chain of type I collagen can recognize collagen alpha 2(1) chain and C-terminal propeptide of pro-alpha 2(1) chain.

Storage

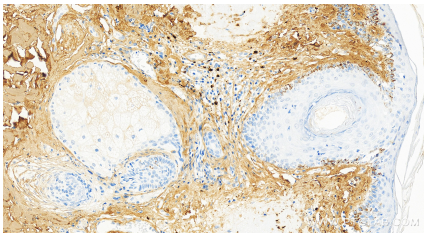
Storage:
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C
Storage Buffer:
PBS Only

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

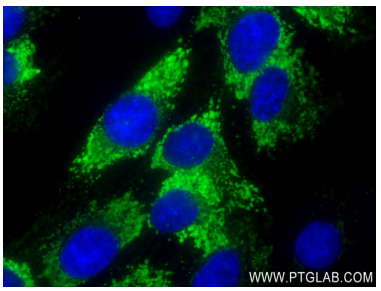
Selected Validation Data



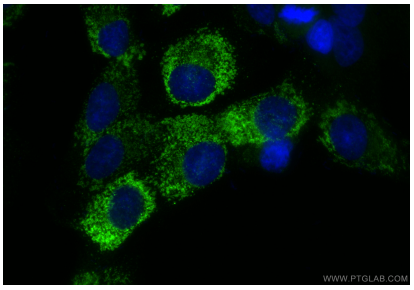
Immunohistochemical analysis of paraffin-embedded human skin tissue slide using 83752-5-RR (Collagen Type I antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83752-5-PBS in a different storage buffer formulation.



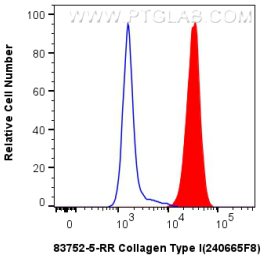
Immunohistochemical analysis of paraffin-embedded human skin tissue slide using 83752-5-RR (Collagen Type I antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83752-5-PBS in a different storage buffer formulation.



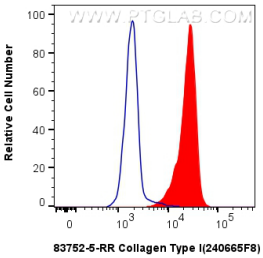
Immunofluorescent analysis of (4% PFA) fixed HSC-T6 cells using COL1A2 antibody (83752-5-RR, Clone: 240665F8) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83752-5-PBS in a different storage buffer formulation.



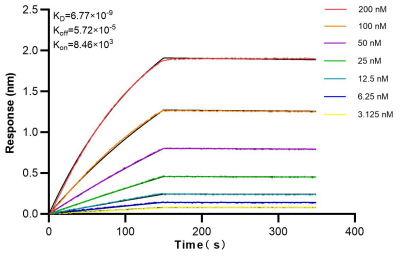
Immunofluorescent analysis of (4% PFA) fixed HSC-T6 cells using Collagen Type I antibody (83752-5-RR, Clone: 240665F8) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83752-5-PBS in a different storage buffer formulation.



1x10^6 HSC-T6 cells were intracellularly stained with 0.25 ug Collagen Type I Recombinant antibody (83752-5-RR, Clone:240665F8) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same



1x10^6 SW480 cells were intracellularly stained with 0.25 ug Collagen Type I Recombinant antibody (83752-5-RR, Clone:240665F8) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same



Biolayer interferometry (BLI) kinetic assays of 83752-5-RR against Human COL1A2 were performed. The affinity constant is 6.77 nM.