For Research Use Only

## Collagen Type I Recombinant antibody, PBS Only

Catalog Number:83752-5-PBS



**Basic Information** 

Catalog Number:

GenBank Accession Number: BC054498

Purification Method: Protein A purfication

83752-5-PBS Size:

GeneID (NCBI):

CloneNo.:

1 mg/ml Source:

AG6281

1278 UNIPROT ID: P08123

240665F8

Rabbit Isotype:

Full Name: collagen, type I, alpha 2

Immunogen Catalog Number:

Calculated MW:

1366 aa, 130 kDa

Observed MW: 120-130 kDa

Applications

Tested Applications:

IF/ICC, 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

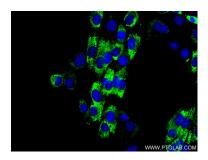
Storage:

Store at -80°C.

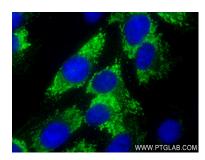
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS Only

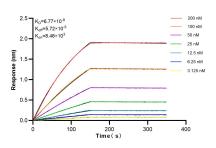
## **Selected Validation Data**



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 1gC(H+L) (SA00015-2). This data was developed using the same antibody clone with 83752-5-PBS in a different storage buffer formulation.



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