

For Research Use Only

# Collagen Type I Recombinant antibody

Catalog Number: 83752-3-RR



## Basic Information

<b>Catalog Number:</b> 83752-3-RR	<b>GenBank Accession Number:</b> BC054498	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1278	<b>CloneNo.:</b> 240665D2
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P08123	<b>Recommended Dilutions:</b> WB 1:1000-1:4000
<b>Isotype:</b> IgG	<b>Full Name:</b> collagen, type I, alpha 2	
<b>Immunogen Catalog Number:</b> AG6281	<b>Calculated MW:</b> 1366 aa, 130 kDa	
	<b>Observed MW:</b> 100-160 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : MG-63 cells, rat skin tissue, Saos-2 cells
<b>Species Specificity:</b> 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

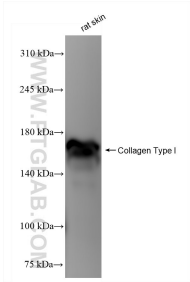
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

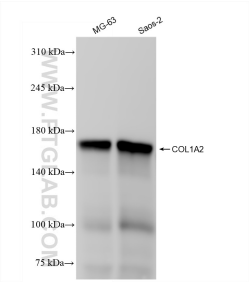
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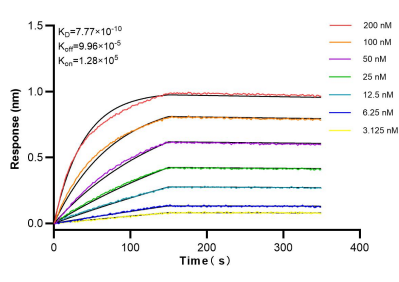
Selected Validation Data



rat skin tissue were subjected to SDS PAGE followed by western blot with 83752-3-RR (Collagen Type I antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 83752-3-RR (COL1A2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 83752-3-RR against Human Collagen Type I were performed. The affinity constant is 0.777 nM.