For Research Use Only

Collagen Type I Recombinant antibody

Catalog Number:83752-3-RR



Basic Information

Catalog Number:

GenBank Accession Number:

Purification Method: Protein A purification

83752-3-RR Size: BC054498 GeneID (NCBI):

CloneNo.:

1000 ug/ml

1278

240665D2

Source: Rabbit UNIPROT ID: P08123 Recommended Dilutions:

WB 1:1000-1:4000

Isotype:

AG6281

Full Name:

collagen, type I, alpha 2

Immunogen Catalog Number:

Calculated MW:

1366 aa, 130 kDa

Observed MW:

100-160 kDa

Applications

Tested Applications:

WB, ELISA

Positive Controls:

Species Specificity:

human, rat

WB: MG-63 cells, rat skin tissue, Saos-2 cells

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:

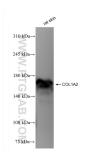
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

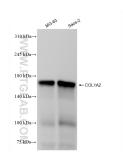
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

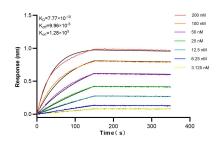
Selected Validation Data



rat skin tissue 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.



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