

Basic Information

Product Name	Anti-Collagen Type I/COL1A1 Antibody	
Gene Name	COL1A1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of mouse Collagen I different from the related human sequence by three amino acids, and identical to the related rat sequence.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	130,180-200	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

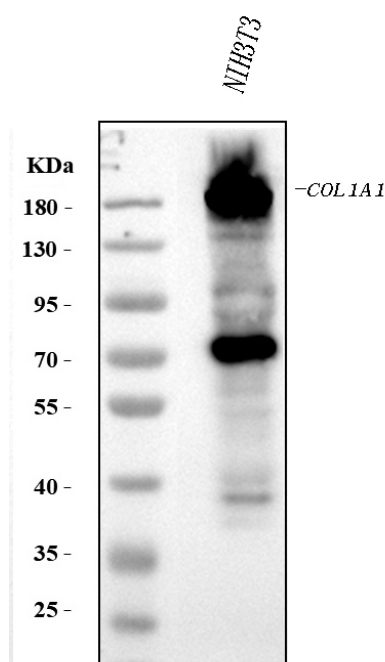
Background Information

Collagen, type I, alpha 1, also known as COL1A1, is a human gene that encodes the major component of type I collagen, the fibrillar collagen found in most connective tissues, including cartilage. This gene is mapped to 17q21.33. And this gene encodes the pro-alpha1 chains of type I collagen whose triple helix comprises two alpha1 chains and one alpha2 chain. Type I is a fibril-forming collagen found in most connective tissues and is abundant in bone, cornea, dermis and tendon. Mutations in this gene are associated with osteogenesis imperfecta types I-IV, Ehlers-Danlos syndrome type VIIA, Ehlers-Danlos syndrome Classical type, Caffey Disease and idiopathic osteoporosis.

Reference

Anti-Collagen Type I/COL1A1 Antibody 被引用在168文献中。

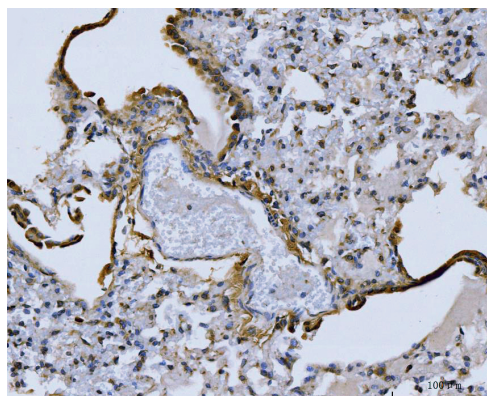
Selected Validation Data



Western blot analysis of Collagen Type I/COL1A1 using anti-Collagen Type I/COL1A1 antibody (PB0981). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Collagen Type I/COL1A1 antigen affinity purified polyclonal antibody (PB0981) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Collagen Type I/COL1A1 at approximately 130,180-200. The expected band size for Collagen Type I/COL1A1 is at 138 kDa.



IHC analysis of Collagen Type I/COL1A1 using anti-Collagen Type I/COL1A1 antibody (PB0981).

Collagen Type I/COL1A1 was detected in a paraffin-embedded section of mouse lung tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Collagen Type I/COL1A1 Antibody (PB0981) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.