

Basic Information

Product Name	Anti-Collagen Type II/COL2A1 Antibody	
Gene Name	COL2A1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	IHC, WB	
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 human Collagen II, different from the related rat sequence by one amino acid, and from the related mouse sequence by two amino acids.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	180-190 kDa	
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 II, alpha 1, also known as COL2A1, is a human gene which is the major collagen synthesized by chondrocytes. COL2A1 is mapped to 12q13.11. This gene encodes the alpha-1 chain of type II collagen, a fibrillar collagen found in cartilage and the vitreous humor of the eye. Mutations in this gene are associated with achondrogenesis, chondrodysplasia, early onset familial osteoarthritis, SED congenita, Langer-Saldino achondrogenesis, Kniest dysplasia, Stickler syndrome type I, and spondyloepimetaphyseal dysplasia Strudwick type. In addition, defects in processing chondrocalcin, a calcium binding protein that is the C-propeptide of this collagen molecule, are also associated with chondrodysplasia.

Reference

Anti-Collagen Type II/COL2A1 Antibody 被引用在125文献中。

Selected Validation Data

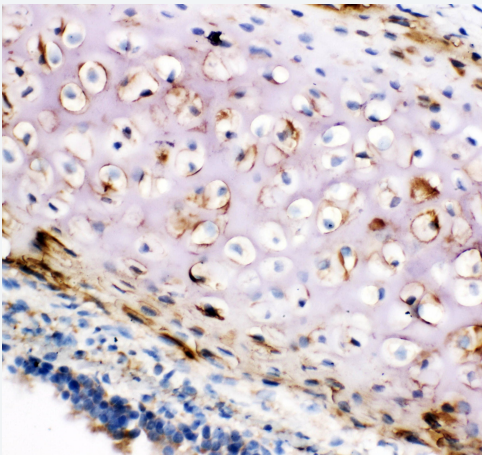


Figure 1. IHC analysis of Collagen Type II/COL2A1 using anti-Collagen Type II/COL2A1 antibody (BA0533).

Collagen Type II/COL2A1 was detected in a paraffin-embedded section of rat trachea tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Collagen Type II/COL2A1 Antibody (BA0533) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1022) as the chromogen.

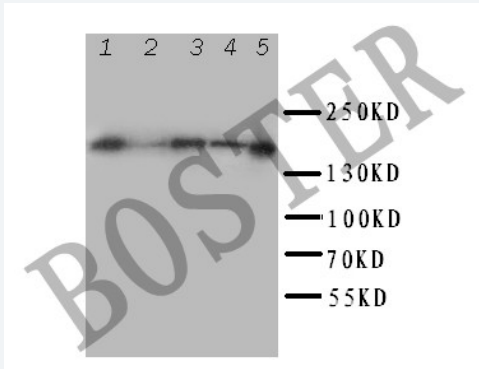


Figure 2. Western blot analysis of Collagen Type II/COL2A1 using anti-Collagen Type II/COL2A1 antibody (BA0533). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human COLO320 whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: human MCF-7 whole cell lysates,

Lane 4: human A549 whole cell lysates,

Lane 5: human Jurkat whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Collagen Type II/COL2A1 antigen affinity purified polyclonal antibody (BA0533) 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 II/COL2A1 at approximately 180-190 kDa. The expected band size for Collagen Type II/COL2A1 is at 142 kDa.