

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	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, which shares 91.7% and 95.8% amino acid (aa) sequence identity with mouse and rat Collagen II, respectively.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	180-190 kDa
Dilution Ratios	Western blot (WB):1:500-2000

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17文献中。

Selected Validation Data

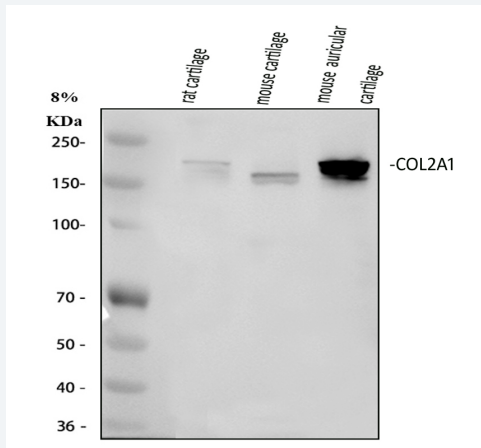


Figure 1. Western blot analysis of Collagen Type II/COL2A1 using anti-Collagen Type II/COL2A1 antibody (A00517-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat cartilage tissue lysates,

Lane 2: mouse cartilage tissue lysates,

Lane 3: mouse auricular cartilage tissue 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 (A00517-1) 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.