

Collagen Type II (ABT501) mouse mAb (Ready to Use)

Catalog No :	YM6854R
Reactivity :	Human;
Applications :	IHC
Target :	Collagen II
Fields :	>>PI3K-Akt signaling pathway;>>Focal adhesion;>>ECM-receptor interaction;>>Protein digestion and absorption;>>Human papillomavirus infection
Gene Name :	COL2A1
Protein Name :	Collagen Type II
Human Gene Id :	1280
Human Swiss Prot No :	P02458
Immunogen :	Synthesized peptide derived from human Collagen Type II AA range: 1200-1300
Specificity :	The antibody can specifically recognize human Collagen Type II protein, collagen types I, III, IV and V do not respond to the antibody.
Formulation :	The prediluted ready-to-use antibody is diluted in phosphate buffer saline containing stabilizing protein and 0.05% Proclin 300
Source :	Mouse, Monoclonal/IgG2b, kappa
Dilution :	Ready to use for IHC
Purification :	The antibody was affinity-purified from ascites by affinity-chromatography using specific immunogen.
Storage Stability :	2°C to 8°C/1 year
Background :	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. There are two transcripts identified for this gene. [provided by RefSeq, Jul 2008],

Function :

disease:Defects in COL2A1 are a cause of primary avascular necrosis of femoral head (ANFH) [MIM:608805]; also called ischemic necrosis of the femoral head or osteonecrosis of the femoral head. ANFH causes disability that often requires surgical intervention. Most cases are sporadic, but families in which there is an autosomal dominant inheritance of the disease have been identified. It has been estimated that 300,000 to 600,000 people in the United States have ANFH. Approximately 15,000 new cases of this common and disabling disorder are reported annually. The age at the onset is earlier than that for osteoarthritis. The diagnosis is typically made when patients are between the ages of 30 and 60 years. The clinical manifestations, such as pain on exertion, a limping gait, and a discrepancy in leg length, cause considerable disability. Moreover, nearly 10 percent of the 500,000 total-hip

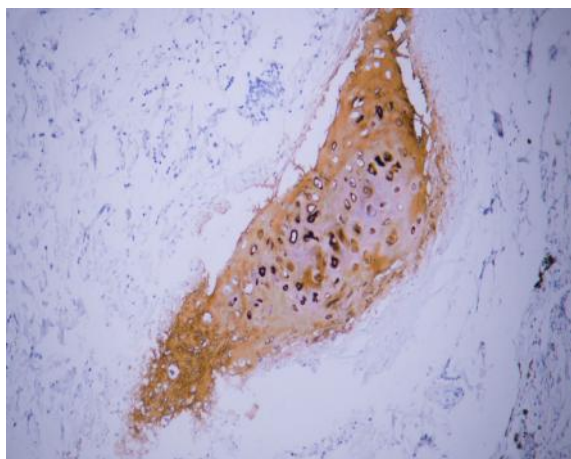
Subcellular Location :

Cytoplasmic

Expression :

Isoform 2 is highly expressed in juvenile chondrocyte and low in fetal chondrocyte.

Products Images



Human cartilage tissue was stained with Anti-Collagen Type II (ABT501) Antibody