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Product datasheet for AP00357PU-N

Collagen II (COL2A1) Goat Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA
Recommended Dilution:	**ELISA:** 1/1000-1/4000.
Reactivity:	Bovine
Host:	Goat
Clonality:	Polyclonal
Immunogen:	Bovine type II collagen
Specificity:	This antibody is specific for Bovine collagen type II and demonstrates less than 10% cross reactivity with bovine collagen types I, III, IV, V and VI. This antibody has not been tested for reactivity with other ECM proteins e.g. laminin and fibronectin. This antibody may cross-react with collagen II from other species.
Formulation:	Borate buffered saline State: Purified State: Liquid Ig fraction Stabilizer: None Preservative: None
Concentration:	lot specific
Purification:	Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	collagen type II alpha 1 chain
Database Link:	Entrez Gene 1280 Human P02458

View online »

Background: Collagens are highly conserved throughout evolution and are characterized by an uninterrupted "Glycine-X-Y" triplet repeat that is a necessary part of the triple helical structure. For these reasons it is often extremely difficult to generate antibodies with specificities to collagens. The development of type specific antibodies is dependent on NON DENATURED three dimensional epitopes. This may result in diminished reactivity of some antibodies with denatured collagen or formalin fixed, paraffin embedded tissues.
Type II collagen is a fibrillar collagen found in cartilage and the vitreous humor of the eye. Collagen type II is essential for the normal embryonic development of the skeleton, for linear growth and for the ability of cartilage to resist compressive forces. 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.

Synonyms: COL2A1, Alpha-1 type II collagen

Protein Pathways: ECM-receptor interaction, Focal adhesion