

## **Product datasheet**

info@arigobio.com

# ARG24002 anti-Collagen II antibody

Package: 50 μl Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes Collagen II

Tested Reactivity Bov

Tested Application ELISA, ICC/IF, IHC-P

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name Collagen II

Species Bovine

Immunogen Type II collagen extracted from Bovine cartilage.

Conjugation Un-conjugated

Alternate Names AOM; ANFH; SEDC; STL1; COL11A3; Collagen alpha-1(II) chain; Alpha-1 type II collagen)

## **Application Instructions**

Application table	Application	Dilution
	ELISA	1:2000
	ICC/IF	1:40
	IHC-P	1:500
Application Note	IHC-P: Antigen Retrieval: treat sections with 0.5% hyaluronidase at RT for 1hr before staining.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

## **Properties**

Form	Liquid
Purification	Purified.
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol	COL2A1
Gene Full Name	collagen, type II, alpha 1

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 Type II collagen is specific for cartilaginous tissues. It is essential for the normal embryonic

development of the skeleton, for linear growth and for the ability of cartilage to resist compressive

forces. [UniProt]

Calculated Mw 142 kDa

PTM Probably 3-hydroxylated on prolines by LEPREL1 (By similarity). Proline residues at the third position of

the tripeptide repeating unit (G-X-P) are hydroxylated in some or all of the chains. Proline residues at the second position of the tripeptide repeating unit (G-P-X) are hydroxylated in some of the chains.

The N-telopeptide is covalently linked to the helical COL2 region of alpha 1(IX), alpha 2(IX) and alpha 3(IX) chain. The C-telopeptide is covalently linked to an another site in the helical region of alpha 3(IX)

COL2. [UniProt]

Cellular Localization Secreted, extracellular space, extracellular matrix. [UniProt]

#### **Images**



#### ARG24002 anti-Collagen II antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Bovine cartilage tissue stained with ARG24002 anti-Collagen II antibody.