Product datasheet

Anti-COL1A2 antibody ab96723

Overview

Product name: Anti-COL1A2 antibody
Description: Rabbit polyclonal to COL1A2
Host species: Rabbit
Tested applications: Suitable for: WB, ICC/IF
Species reactivity: Reacts with: Rat, Human
Predicted to work with: Mouse, Cow, Dog, Monkey
Immunogen: Recombinant protein fragment corresponding to a region within amino acids 1057 and 1339 of COL1A2 (NP_000080).
Positive control: WB: 293T and A431 cell lysate ICC/IF: A431 cell

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer: pH: 7.00
Preservative: 0.01% Thimerosal (merthiolate)
Constituents: 10% Glycerol, 1.21% Tris, 0.75% Glycine
Purity: Immunogen affinity purified
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab96723 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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Function
Type I collagen is a member of group I collagen (fibrillar forming collagen).

Tissue specificity
Forms the fibrils of tendon, ligaments and bones. In bones the fibrils are mineralized with calcium hydroxyapatite.

Involvement in disease
- Ehlers-Danlos syndrome 7B
- Osteogenesis imperfecta 1
- Osteogenesis imperfecta 2
- Ehlers-Danlos syndrome, autosomal recessive, cardiac valvular form
- Osteogenesis imperfecta 3
- Osteogenesis imperfecta 4
A chromosomal aberration involving COL1A2 may be a cause of lipoblastomas, which are benign tumors resulting from transformation of adipocytes, usually diagnosed in children. Translocation t(7;8)(p22;q13) with PLAG1.

Sequence similarities
Belongs to the fibrillar collagen family.
Contains 1 fibrillar collagen NC1 domain.

Domain
The C-terminal propeptide, also known as COLFI domain, have crucial roles in tissue growth and repair by controlling both the intracellular assembly of procollagen molecules and the extracellular assembly of collagen fibrils. It binds a calcium ion which is essential for its function.

Post-translational modifications
Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.

Cellular localization
Secreted > extracellular space > extracellular matrix.

Images

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<td>ICC/IF</td>
<td>1/100 - 1/200.</td>
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**All lanes**: Anti-COL1A2 antibody (ab96723) at 1/1000 dilution

**Lane 1**: 293T whole cell lysate
**Lane 2**: A431 whole cell lysate

Lysates/proteins at 30 µg per lane.

**Predicted band size**: 129 kDa

7.5% SDS PAGE
Immunofluorescence analysis of COL1A2 in paraformaldehyde fixed A431 cell, using ab96723 at a 1/200 dilution. Lower image: merged with DNA probe.

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