

Product datasheet

Anti-Collagen X antibody [COL-10] ab49945

★★★★★ [5 Abreviews](#) [87 References](#) [2 Images](#)

Overview

Product name	Anti-Collagen X antibody [COL-10]
Description	Mouse monoclonal [COL-10] to Collagen X
Host species	Mouse
Tested applications	Suitable for: IHC-P, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Purified pig Collagen type X.
Epitope	Hybridoma produced by the fusion of mouse myeloma cells and splenocytes from a BALB/c mouse immunized with porcine collagen type X.
Positive control	IHC-P: Enzyme treated sections of decalcified human osteochondroma.
General notes	<p>This product was changed from ascites to tissue culture supernatant on 17 May 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.4</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituent: 0.142% Dibasic monohydrogen sodium phosphate</p>
Purity	Tissue culture supernatant
Clonality	Monoclonal

Clone number	COL-10
Isotype	IgM

Applications

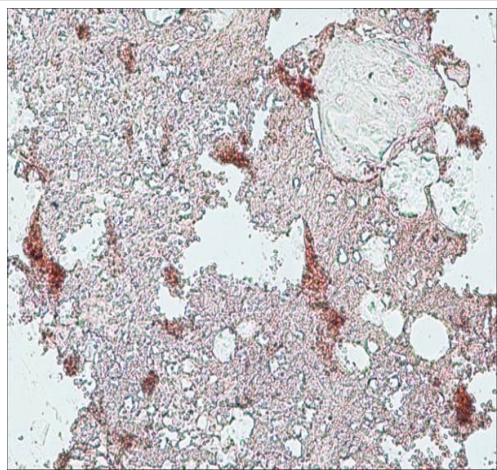
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab49945 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (3)	Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

Target

Function	Type X collagen is a product of hypertrophic chondrocytes and has been localized to presumptive mineralization zones of hyaline cartilage.
Involvement in disease	Defects in COL10A1 are the cause of Schmid type metaphyseal chondrodysplasia (SMCD) [MIM:156500]. SMCD is a dominantly inherited disorder of the osseous skeleton. The cardinal features of the phenotype are mild short stature, coxa vara and a waddling gait. Radiography usually shows sclerosis of the ribs, flaring of the metaphyses, and a wide irregular growth plate, especially of the knees. A variant form of SMCD is spondylometaphyseal dysplasia Japanese type. It is characterized by spinal involvement comprising mild platyspondyly, vertebral body abnormalities, and end-plate irregularity.
Sequence similarities	Contains 1 C1q domain.
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.

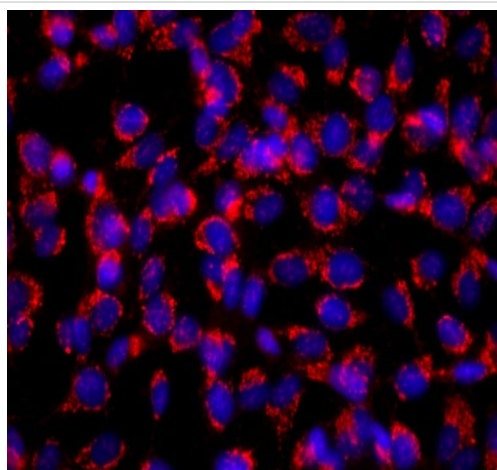
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Collagen X antibody [COL-10] (ab49945)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human osteochondroma tissue labelling Collagen X with ab49945 at a dilution of 1/1000.

This image was generated using the ascites version of the product.



Immunocytochemistry/ Immunofluorescence - Anti-Collagen X antibody [COL-10] (ab49945)

ICC/IF of HT1080 human fibrosarcoma cells labelling Collagen X with ab49945 at 1/1000 dilution. The cells were methanol acetone fixed. Secondary antibody was a Cy3 anti mouse IgG. Nuclei are stained with DAPI.

This image was generated using the ascites version of the product.

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