

Product datasheet

Anti-Collagen X antibody [EPR13044] ab182563

Recombinant RabMAb

[22 References](#) [3 Images](#)

Overview

Product name	Anti-Collagen X antibody [EPR13044]
Description	Rabbit monoclonal [EPR13044] to Collagen X
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human fetal skin and placenta tissue lysates; Rat skin tissue lysates.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</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: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 40% Glycerol, 59% PBS, 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR13044
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab182563 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
WB		1/1000 - 1/2000. Detects a band of approximately 66 kDa (predicted molecular weight: 66 kDa).

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.

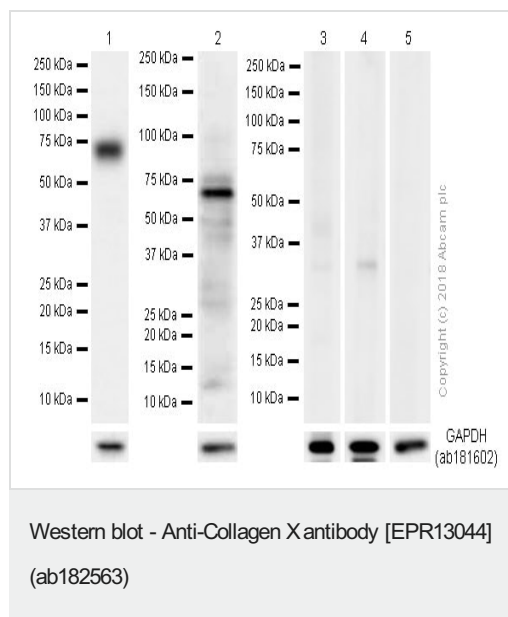
Post-translational modifications

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



All lanes : Anti-Collagen X antibody [EPR13044] (ab182563) at 1/1000 dilution

Lane 1 : Human fetal skin tissue lysates

Lane 2 : Rat skin tissue lysates

Lane 3 : Mouse cartilage tissue lysates

Lane 4 : Human cartilage tissue lysates

Lane 5 : Rat cartilage tissue lysates

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 66 kDa

Observed band size: 66 kDa

Exposure time

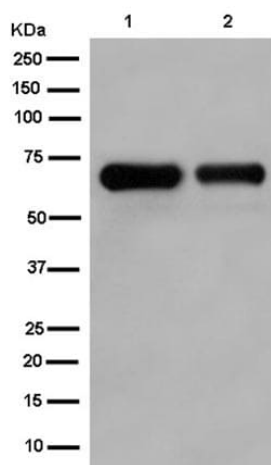
Lane 1: 6 seconds

Lane 2: 70 seconds

Lane 3 to 5: 10 seconds

Blocking/Diluting buffer and concentration 5% NFDM/TBST

Collagen X is normally not expressed in human healthy cartilage but its expression is detected at protein and mRNA level in human osteoarthritic cartilage according to PMID 22178514 and 26861791.



Western blot - Anti-Collagen X antibody [EPR13044] (ab182563)

All lanes : Anti-Collagen X antibody [EPR13044] (ab182563) at 1/1000 dilution

Lane 1 : Human fetal skin lysate

Lane 2 : Human placenta lysate

Lysates/proteins at 20 µg per lane.

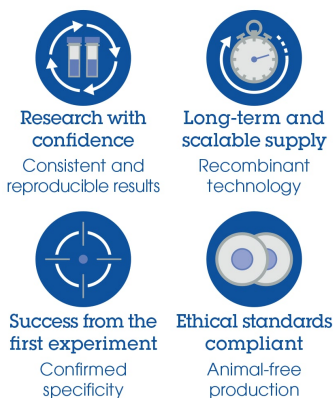
Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 66 kDa

Additional bands at: 66 kDa. We are unsure as to the identity of these extra bands.

Why choose a recombinant antibody?



Anti-Collagen X antibody [EPR13044] (ab182563)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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