




Product datasheet

Anti-COMP/Cartilage oligomeric matrix protein antibody ab231977

★★★★★ [2 Abreviews](#) [13 References](#) [3 Images](#)

Overview

Product name	Anti-COMP/Cartilage oligomeric matrix protein antibody
Description	Rabbit polyclonal to COMP/Cartilage oligomeric matrix protein
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Cow 
Immunogen	Recombinant fragment (His-T7-tag) corresponding to Human COMP/Cartilage oligomeric matrix protein aa 100-250. (Expressed in E.coli). Database link: P49747  Run BLAST with  Run BLAST with
Positive control	WB: Recombinant human COMP/Cartilage oligomeric matrix protein; Human and mouse cartilage tissue lysate. IHC-P: Human testis tissue.
General notes	<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	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 44.12% PBS, 55.77% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified

Purification notes	Antigen-specific affinity chromatography followed by Protein A affinity chromatography.
Clonality	Polyclonal
Isotype	IgG

Applications

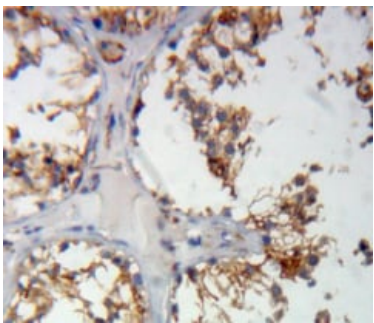
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab231977 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (1)	Use a concentration of 5 - 20 µg/ml.
WB		Use a concentration of 0.5 - 5 µg/ml. Predicted molecular weight: 83 kDa.

Target

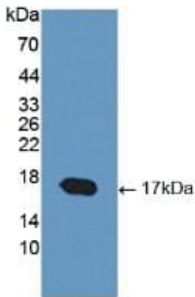
Function	May play a role in the structural integrity of cartilage via its interaction with other extracellular matrix proteins such as the collagens and fibronectin. Can mediate the interaction of chondrocytes with the cartilage extracellular matrix through interaction with cell surface integrin receptors. Could play a role in the pathogenesis of osteoarthritis. Potent suppressor of apoptosis in both primary chondrocytes and transformed cells. Suppresses apoptosis by blocking the activation of caspase-3 and by inducing the IAP family of survival proteins (BIRC3, BIRC2, BIRC5 and XIAP). Essential for maintaining a vascular smooth muscle cells (VSMCs) contractile/differentiated phenotype under physiological and pathological stimuli. Maintains this phenotype of VSMCs by interacting with ITGA7.
Tissue specificity	Abundantly expressed in the chondrocyte extracellular matrix, and is also found in bone, tendon, ligament and synovium and blood vessels. Increased amounts are produced during late stages of osteoarthritis in the area adjacent to the main defect.
Involvement in disease	Defects in COMP are the cause of multiple epiphyseal dysplasia type 1 (EDM1) [MIM:132400]. EDM is a generalized skeletal dysplasia associated with significant morbidity. Joint pain, joint deformity, waddling gait, and short stature are the main clinical signs and symptoms. EDM is broadly categorized into the more severe Fairbank and the milder Ribbing types. Defects in COMP are the cause of pseudoachondroplasia (PSACH) [MIM:177170]. PSACH is a dominantly inherited chondrodysplasia characterized by short stature and early-onset osteoarthritis. PSACH is more severe than EDM1 and is recognized in early childhood.
Sequence similarities	Belongs to the thrombospondin family. Contains 4 EGF-like domains. Contains 1 TSP C-terminal (TSPC) domain. Contains 8 TSP type-3 repeats.
Developmental stage	Present during the earliest stages of limb maturation and is later found in regions where the joints develop.
Domain	The cell attachment motif mediates the attachment to chondrocytes. It mediates the induction of both the IAP family of survival proteins and the antiapoptotic response. The TSP C-terminal domain mediates interaction with FN1 and ACAN.
Cellular localization	Secreted > extracellular space > extracellular matrix.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COMP/Cartilage oligomeric matrix protein antibody (ab231977)

Formalin-fixed, paraffin-embedded human testis tissue stained for COMP/Cartilage oligomeric matrix protein using ab231977 at 20 µg/ml in immunohistochemical analysis. DAB staining.



Western blot - Anti-COMP/Cartilage oligomeric matrix protein antibody (ab231977)

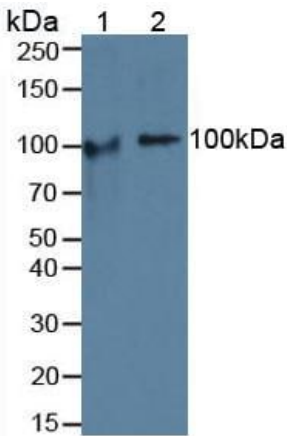
Anti-COMP/Cartilage oligomeric matrix protein antibody (ab231977) at 3 µg/ml + Recombinant human COMP/Cartilage oligomeric matrix protein

Secondary

HRP-Linked Guinea pig Anti-Rabbit Ab at 1/2000 dilution

Developed using the ECL technique.

Predicted band size: 83 kDa



Western blot - Anti-COMP/Cartilage oligomeric matrix protein antibody (ab231977)

All lanes : Anti-COMP/Cartilage oligomeric matrix protein antibody (ab231977) at 3 µg/ml

Lane 1 : Human cartilage tissue lysate

Lane 2 : Mouse cartilage tissue lysate

Secondary

All lanes : HRP-Linked Guinea pig Anti-Rabbit Ab at 1/2000 dilution

Developed using the ECL technique.

Predicted band size: 83 kDa

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