

Datasheet: MCA1455G

Description:	RAT ANTI HUMAN CARTILAGE OLIGOMERIC MATRIX PROTEIN
Specificity:	CARTILAGE OLIGOMERIC MATRIX PROTEIN
Other names:	COMP
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MA37C94 (HC484D1)
Isotype:	IgG2a
Quantity:	0.2 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen	■			
Immunohistology - Paraffin	■			
ELISA	■			
Immunoprecipitation	■			
Western Blotting	■			1/200 - 1/2000

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN ₃)

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Human cartilage derived COMP
External Database Links	<p>UniProt: P49747 Related reagents</p> <p>Entrez Gene: 1311 COMP Related reagents</p>
Fusion Partners	Spleen cells from immunized Wistar rats were fused with cells of the mouse NS1 myeloma cell line
Specificity	<p>Rat anti Human cartilage oligomeric matrix protein antibody, clone MA37C94 recognizes human cartilage oligomeric matrix protein (COMP), otherwise known as thrombospondin-5 (TSP-5). COMP is a 757 amino acid matrix glycoprotein bearing four EGF-like domains, a single TSP C-terminal domain and eight TSP type-3 repeats (Uniprot P49747). Defects in the COMP gene can lead to the presence of pseudoachondroplasia or multiple epiphyseal dysplasia (Posey et al. 2014).</p> <p>Rat anti Human cartilage oligomeric matrix protein, clone MA37C94 recognizes an epitope located in the central portion of the molecule and has been described as suitable for use in western blotting (Gagarina et al. 2008) and immunohistochemistry (Grigoriadis et al. 2006).</p>
References	<ol style="list-style-type: none"> 1. Milz, S. <i>et al.</i> (2005) An immunohistochemical study of the extracellular matrix of the tarsal plate in the upper eyelid in human beings. J Anat. 206 (1): 37-45. 2. Jäger, M. <i>et al.</i> (2006) Ovine cord blood accommodates multipotent mesenchymal progenitor cells. In Vivo. 20: 205-14. 3. Grigoriadis, A. <i>et al.</i> (2006) Establishment of the epithelial-specific transcriptome of normal and malignant human breast cells based on MPSS and array expression data. Breast Cancer Res. 8: R56. 4. Milz, S. <i>et al.</i> (2007) An immunohistochemical study of the triangular fibrocartilage complex of the wrist: regional variations in cartilage phenotype. J Anat. 211 (1): 1-7. 5. Gagarina, V. <i>et al.</i> (2008) Cartilage oligomeric matrix protein protects cells against death by elevating members of the IAP family of survival proteins. J Biol Chem 283: 648-59. 6. Zilkens, C. <i>et al.</i> (2010) Spinning around or stagnation - what do osteoblasts and chondroblasts really like? Eur J Med Res. 15 (1): 35-43. 7. Inui, S. <i>et al.</i> (2011) Identification and characterization of cartilage oligomeric matrix protein as a novel pathogenic factor in keloids. Am J Pathol. 179 (4): 1951-60. 8. Nemoto, M. <i>et al.</i> (2013) Tenascin-C Expression in Equine Tendon-derived Cells During Proliferation and Migration. J Equine Sci. 24 (2): 17-24. 9. Viehöfer, A.F. <i>et al.</i> (2015) The molecular composition of the extracellular matrix of the

human iliolumbar ligament. [Spine J. 15 \(6\): 1325-31.](#)

10. Kobayashi, M. *et al.* (2016) Cartilage Oligomeric Matrix Protein Increases in Photodamaged Skin. [J Invest Dermatol. 136 \(6\): 1143-9.](#)

11. Gong, S.D. *et al.* (2019) Elevated plasma cartilage oligomeric matrix protein (COMP) level are associated with the progression of non-traumatic osteonecrosis of femoral head. [Clin Chim Acta. 490: 214-21.](#)

Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.
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Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1455G 10040
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
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