Datasheet: MCA1455G

BATCH NUMBER 1702

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

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Human cartilage derived COMP
External Database Links	**UniProt:** P49747 Related reagents **Entrez Gene:** 1311 COMP Related reagents
Fusion Partners	Spleen cells from immunized Wistar rats were fused with cells of the mouse NS1 myeloma cell line
Specificity	**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). 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).
References	1. Grigoriadis, A.*et al.* (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. 2. Milz, S. *et al.* (2007) An immunohistochemical study of the triangular fibrocartilage complex of the wrist: regional variations in cartilage phenotype. J Anat. 211: 1-7. 3. Gagarina, V. *et al.* (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. 4. Jäger, M. *et al.* (2006) Ovine cord blood accommodates multipotent mesenchymal progenitor cells. In Vivo. 20: 205-14. 5. Kobayashi, M. *et al.* (2016) Cartilage Oligomeric Matrix Protein Increases in Photodamaged Skin. J Invest Dermatol. 136 (6): 1143-9. 6. Milz, S. *et al.* (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. 7. Zilkens, C. *et al.* (2010) Spinning around or stagnation - what do osteoblasts and chondroblasts really like? Eur J Med Res. 15 (1): 35-43. 8. Milz, S. *et al.* (2007) An immunohistochemical study of the triangular fibrocartilage complex of the wrist: regional variations in cartilage phenotype. J Anat. 211 (1): 1-7. 9. Inui, S. *et al.* (2011) Identification and characterization of cartilage oligomeric matrix

protein as a novel pathogenic factor in keloids. Am J Pathol. 179 (4): 1951-60.
10. Viehöfer, A.F. *et al.* (2015) The molecular composition of the extracellular matrix of the human iliolumbar ligament. Spine J. 15 (6): 1325-31.
11. Nemoto, M. *et al.* (2013) Tenascin-C Expression in Equine Tendon-derived Cells During Proliferation and Migration. J Equine Sci. 24 (2): 17-24.

Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1455G 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com
Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com
Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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