

Datasheet: MCA6257B

Description:	MOUSE ANTI HUMAN MMP-2:Biotin
Specificity:	MMP-2
Other names:	72 kDa type IV collagenase
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	J08-3B10
Isotype:	IgG2b
Quantity:	0.1 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
ELISA	▪			1.0 ug/ml

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 conjugated to Biotin - 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) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	<i>E. coli</i> derived recombinant human partial length of MMP-2 (Tyr110-Thr465)

**External Database
Links**

UniProt:

[P08253](#) [Related reagents](#)

Entrez Gene:

[4313](#) MMP2 [Related reagents](#)

Synonyms

CLG4A

Fusion Partners

Cell fusion between immunized BALB/c mouse spleen cells and mouse myeloma SP2/0

Specificity

Mouse anti Human MMP-2 antibody, clone J08-3B10, recognizes matrix metalloproteinase-2 also known as 72 kDa type IV collagenase, 72 kDa gelatinase and gelatinase A. MMP-2 is a member of the metzincins superfamily of proteases and is produced by various cells and tissues including the endothelium, vascular smooth muscle cells, adventitia platelets and leukocytes ([Cui et al. 2017](#)).

MMP-2 is largely expressed by connective and vascular tissues and cells due to its roles in extracellular matrix remodeling. It is synthesized as a pre-proenzyme before being processed to remove the signal peptide forming the 72 kDa pro-MMP-2. Pro-MMP-2 is then recruited to the cell surface where it undergoes autocatalytic cleavage to form the active 63 kDa form.

Like other MMP's, MMP-2 plays a major role in tissue remodeling through the promotion of extracellular matrix (ECM) protein turnover. Specifically MMP-2 degrades the collagen proteins, type I, II, III, IV, V, VII, X, XI and gelatin. It is also able to target other ECM substrates including aggrecan, elastin, fibronectin and laminin ([Cui et al. 2017](#)). However a number of non-matrix proteins have been identified as targets of MMP-2, to regulate various physiological and pathophysiological processes including embryonic growth/development, angiogenesis, vascular diseases, inflammation, infective diseases and tumor progression. MMP-2 may also play a role in airway remodeling and may be responsible for the progressive decline of lung function in bronchial asthma ([Kuwabara et al. 2018](#)).

The biotinylated Mouse anti Human MMP-2 antibody, clone J08-3B10 (MCA6257B) can be used as a detection antibody in a sandwich ELISA with the purified Mouse anti Human MMP-2 antibody, clone C12-8A3 ([MCA6256GA](#)) as the capture antibody.

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.

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

Health And Safety

Material Safety Datasheet documentation #10041 available at:

Information 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Useful Reagents

[MOUSE ANTI HUMAN MMP-2 \(MCA6256GA\)](#)

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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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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