

## Datasheet: MCA6197B

<b>Description:</b>	MOUSE ANTI HUMAN MMP-9:Biotin
<b>Specificity:</b>	MMP-9
<b>Other names:</b>	Matrix metalloproteinase-9
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	B10-7B9
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG conjugated to Biotin - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>Immunogen</b>	<i>E. coli</i> derived recombinant fragment of human MMP-9 (Gly373-Pro456)

**External Database  
Links**

**UniProt:**

[P14780](#)    [Related reagents](#)

**Entrez Gene:**

[4318](#)    MMP9    [Related reagents](#)

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**Synonyms**

CLG4B

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**Fusion Partners**

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

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**Specificity**

**Mouse anti Human MMP-9 antibody, clone B10-7B9**, recognizes matrix metalloproteinase 9 (MMP-9) also known as 92 kDa gelatinase and 92 kDa type IV collagenase. MMP-9 is a member of the zinc-dependent endopeptidases and is expressed in various cell types, including neutrophils, macrophages, fibroblasts and endothelial cell ([Huang 2018](#)). Expression of MMP-9 is induced by pro-inflammatory cytokines and is synthesized as a pre-proenzyme with a 19 amino acid N-terminal signal peptide. It can then be secreted by the cell into the extracellular environment where it is modified into the inactive pro-MMP9. At this point it can be activated by various proteases such as MMP-3, to generate the activated 82 kDa form ([Vandooren et al. 2013](#)). Activated MMP-9 can proteolytically cleave many extracellular matrix proteins including gelatin, collagen and elastin as part of extracellular matrix remodeling.

Overexpression of MMP-9 has been observed in a range of malignant tumors and its' extracellular matrix remodeling has been linked with mediating tumor invasion, metastasis, angiogenesis and regulating the tumor microenvironment ([Huang 2018](#)). MMP-9 has also been associated with other pathologies including autoimmune and cardiovascular diseases.

The biotinylated Mouse anti Human MMP-9 antibody, clone B10-7B9 (MCA6197B) can be used as a detection antibody in a sandwich ELISA with the purified Mouse anti Human MMP-9 antibody, clone I13-2E1 ([MCA6196GA](#)) as the capture antibody.

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety  
Information**

Material Safety Datasheet documentation #10041 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA6197B>  
10041

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Useful Reagents

[MOUSE ANTI HUMAN MMP-9 \(MCA6196GA\)](#)

### ELISA Matched Pair - Capture Antibody

[MOUSE ANTI HUMAN MMP-9 \(MCA6196GA\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto:antibody_sales_de@bio-rad.com)

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

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**Printed on 18 Jan 2024**

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