

Datasheet: MCA6197B

Description:	MOUSE ANTI HUMAN MMP-9:Biotin
Specificity:	MMP-9
Other names:	Matrix metalloproteinase-9
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	B10-7B9
Isotype:	IgG2a
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 fragment of human MMP-9 (Gly373-Pro456)

**External Database
Links**

UniProt:

[P14780](#) [Related reagents](#)

Entrez Gene:

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

Synonyms

CLG4B

Fusion Partners

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

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.

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
Information**

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

Regulatory

For research purposes only

Related Products

Recommended Useful Reagents

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

ELISA Matched Pair - Capture Antibody

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

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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

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