

## Datasheet: MCA6259B

<b>Description:</b>	MOUSE ANTI HUMAN MMP-3:Biotin
<b>Specificity:</b>	MMP-3
<b>Other names:</b>	Stromelysin-1
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	G05-6A10
<b>Isotype:</b>	IgG1
<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 human partial length of MMP-3 (Phe100-Cys477)

**External Database  
Links**

**UniProt:**

[P08254](#)    [Related reagents](#)

**Entrez Gene:**

[4314](#)    MMP3    [Related reagents](#)

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**Synonyms**

STMY1

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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-3 antibody, clone G05-6A10**, recognizes matrix metalloproteinase-3 (MMP-3) also known as stromelysin-1 (SL-1) and transin-1. MMP-3 is a member of the metzincins superfamily of proteases and is produced by various cells and tissues including the endothelium, vascular smooth muscle cells intima and platelets ([Cui et al. 2017](#)).

MMP-3 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 57 kDa pro-MMP-3. This is then further cleaved by proteolytic enzymes to create the 45 kDa active form.

Like other MMP's, MMP-3 plays a major role in tissue remodeling through the promotion of extracellular matrix (ECM) protein turnover. Specifically MMP-3 degrades the collagen proteins, type II, IV, IX as well as the proteoglycans elastin fibronectin and laminin ([Cui et al. 2017](#)). Through the degradation of these ECM components, growth factors and adhesion molecules, MMP-3 can modify the extracellular environment and modulate cell to cell signaling. As such, MMP-3 is implicated in synaptic plasticity through enzymatic modification of ECM constituents ([Lech et al. 2019](#)).

The biotinylated Mouse anti Human MMP-3 antibody, clone G05-6A10 (MCA6259B) can be used as a detection antibody in a sandwich ELISA with the purified Mouse anti Human MMP-3 antibody, clone I08-9G7 ([MCA6258GA](#)) 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/MCA6259B>  
10041

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Useful Reagents

[MOUSE ANTI HUMAN MMP-3 \(MCA6258GA\)](#)

[RECOMBINANT HUMAN MMP-3 \(PHP304\)](#)

### ELISA Matched Pair - Capture Antibody

[MOUSE ANTI HUMAN MMP-3 \(MCA6258GA\)](#)

### ELISA Antigen - Positive Control

[RECOMBINANT HUMAN MMP-3 \(PHP304\)](#)

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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://bio-rad-antibodies.com/datasheets)

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