

## Datasheet: MCA6254GA

<b>Description:</b>	MOUSE ANTI HUMAN MMP-1
<b>Specificity:</b>	MMP-1
<b>Other names:</b>	Interstitial collagenase
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	F08-2F1
<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 - 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> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml

**Immunogen** *E. coli* derived recombinant human partial length of MMP-1 (Phe100-Thr274)

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**External Database Links**

**UniProt:**

[P03956](#) [Related reagents](#)

**Entrez Gene:**

[4312](#) MMP1 [Related reagents](#)

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**Synonyms** CLG

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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-1 antibody, clone F08-2F1**, recognizes matrix metalloproteinase-1 (MMP-1), also known as interstitial collagenase and fibroblast collagenase. MMP-1 is a 45 kDa protein in its active form and is a member of the metzincins superfamily of proteases. It is produced by various cells and tissues including the endothelium, fibroblasts, smooth muscle cells, vascular adventitia and platelets ([Cui et al. 2017](#)).

MMP-1 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 pro-MMP-1. This is then further cleaved by proteolytic enzymes to create the active form. Like other MMP's, MMP-1 plays a major role in tissue remodeling through the promotion of extracellular matrix (ECM) protein turnover. Specifically MMP-1 degrades the collagen proteins type I, II, III, VII, VIII, X and gelatin. It is also able to target other ECM substrates including aggrecan, nidogen and perlecan ([Cui et al. 2017](#)).

MMP1 expression levels are low in most cells under physiological conditions, but are upregulated during inflammatory conditions and autoimmune diseases ([Mittal et al. 2016](#)). For example a single nucleotide polymorphism of MMP-1 at the promoter region has been associated with an increased risk of sudden deafness linked to circulatory disturbance and inflammation ([Nam et al. 2011](#)).

The purified Mouse anti Human MMP-1 antibody, clone F08-2F1 (MCA6254GA) can be used as a capture antibody in a sandwich ELISA with the biotinylated Mouse anti Human MMP-1 antibody, clone F09-3C7 ([MCA6255B](#)) as the detection 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 #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA6254GA>  
10040

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR8...)	<a href="#">DyLight@800</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

### Recommended Useful Reagents

[MOUSE ANTI HUMAN MMP-1:Biotin \(MCA6255B\)](#)

### ELISA Matched Pair - Detection Antibody

[MOUSE ANTI HUMAN MMP-1:Biotin \(MCA6255B\)](#)

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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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