

Datasheet: MCA6254GA BATCH NUMBER 100005239

| Description: | MOUSE ANTI HUMAN MMP-1 | | | |
|---------------|--------------------------|--|--|--|
| Specificity: | MMP-1 | | | |
| Other names: | Interstitial collagenase | | | |
| Format: | Purified | | | |
| Product Type: | Monoclonal Antibody | | | |
| Clone: | F08-2F1 | | | |
| Isotype: | lgG1 | | | |
| 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 - liquid | |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G from tissue cultur supernatant | е |
| Buffer Solution | Phosphate buffered saline | |
| Preservative Stabilisers | 0.09% Sodium Azide (NaN ₃) | |
| Carrier Free | Yes | |
| Approx. Protein Concentrations | IgG concentration 1.0 mg/ml | |

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

External Database Links

UniProt:

P03956 Related reagents

Entrez Gene:

4312 MMP1 Related reagents

Synonyms

CLG

Fusion Partners

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

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 (<u>Cui et al.</u> 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 (<u>Mittal et al. 2016</u>). 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 (<u>Nam et al. 2011</u>).

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.

Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of despatch

Health And Safety

Material Safety Datasheet documentation #10040 available at:

Information https://www.bio-rad-antibodies.com/SDS/MCA6254GA

10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) RPE

Goat Anti Mouse IgG IgA IgM (STAR87...) HRP

Goat Anti Mouse IgG (STAR76...) RPE

Rabbit Anti Mouse IgG (STAR13...) HRP

Goat Anti Mouse IgG (STAR70...) FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) <u>FITC</u>

Goat Anti Mouse IgG (STAR77...) HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

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 'M380417:210511'

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