

Datasheet: MCA6256GA

Description:	MOUSE ANTI HUMAN MMP-2
Specificity:	MMP-2
Other names:	72 kDa type IV collagenase
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	C12-8A3
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 - 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)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen *E. coli* derived recombinant human partial length of MMP-2 (Tyr110-Thr465)

External Database

Links

UniProt:

[P08253](#) [Related reagents](#)

Entrez Gene:

[4313](#) MMP2 [Related reagents](#)

Synonyms

CLG4A

Fusion Partners

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

Specificity

Mouse anti Human MMP-2 antibody, clone C12-8A3, recognizes matrix metalloproteinase-2 also known as 72 kDa type IV collagenase, 72 kDa gelatinase and gelatinase A. MMP-2 is a member of the metzincins superfamily of proteases and is produced by various cells and tissues including the endothelium, vascular smooth muscle cells, adventitia platelets and leukocytes ([Cui et al. 2017](#)).

MMP-2 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 72 kDa pro-MMP-2. Pro-MMP-2 is then recruited to the cell surface where it undergoes autocatalytic cleavage to form the active 63 kDa form.

Like other MMP's, MMP-2 plays a major role in tissue remodeling through the promotion of extracellular matrix (ECM) protein turnover. Specifically MMP-2 degrades the collagen proteins, type I, II, III, IV, V, VII, X, XI and gelatin. It is also able to target other ECM substrates including aggrecan, elastin, fibronectin and laminin ([Cui et al. 2017](#)). However a number of non-matrix proteins have been identified as targets of MMP-2, to regulate various physiological and pathophysiological processes including embryonic growth/development, angiogenesis, vascular diseases, inflammation, infective diseases and tumor progression. MMP-2 may also play a role in airway remodeling and may be responsible for the progressive decline of lung function in bronchial asthma ([Kuwabara et al. 2018](#)).

The purified Mouse anti Human MMP-2 antibody, clone C12-8A3 (MCA6256GA) can be used as a capture antibody in a sandwich ELISA with the biotinylated Mouse anti Human MMP-2 antibody, clone J08-3B10 ([MCA6257B](#)) as the detection 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 #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Rabbit Anti Mouse IgG (STAR8...) [DyLight@800](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Human Anti Mouse IgG2a (HCA037...) [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@680](#),
[DyLight@800](#), [FITC](#), [HRP](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

Recommended Useful Reagents

[MOUSE ANTI HUMAN MMP-2:Biotin \(MCA6257B\)](#)

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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)
'M384213:210513'

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