

Datasheet: MCA6256GA

BATCH NUMBER 100005240

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	<i>E. coli</i> derived recombinant human partial length of MMP-2 (Tyr110-Thr465)
External Database Links	<p>UniProt: P08253 Related reagents</p> <p>Entrez Gene: 4313 MMP2 Related reagents</p>
Synonyms	CLG4A
Fusion Partners	Cell fusion between immunized BALB/c mouse spleen cells and mouse myeloma SP2/0
Specificity	<p>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).</p> <p>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.</p> <p>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).</p> <p>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.</p>
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>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.</p>
Guarantee	12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA6256GA>
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...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

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)
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