

Datasheet: MCA6255B

BATCH NUMBER 100005182

Description:	MOUSE ANTI HUMAN MMP-1:Biotin
Specificity:	MMP-1
Other names:	Interstitial collagenase
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	F09-3C7
Isotype:	IgG1
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 conjugated to Biotin - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide (NaN ₃)
Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	<i>E. coli</i> 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	<p>Mouse anti Human MMP-1 antibody, clone F09-3C7, 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).</p> <p>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).</p> <p>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).</p> <p>The biotinylated Mouse anti Human MMP-1 antibody, clone F09-3C7 (MCA6255B) can be used as a detection antibody in a sandwich ELISA with the purified Mouse anti Human MMP-1 antibody, clone F08-2F1 (MCA6254GA) as the capture 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	<p>Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</p>

Related Products

Recommended Useful Reagents

[MOUSE ANTI HUMAN MMP-1 \(MCA6254GA\)](#)

ELISA Matched Pair - Capture Antibody

[MOUSE ANTI HUMAN MMP-1 \(MCA6254GA\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M380418:210511'

Printed on 14 Feb 2023