

Datasheet: MCA6279B

Description:	MOUSE ANTI HUMAN TIMP-1:Biotin
Specificity:	TIMP-1
Other names:	Metalloproteinase inhibitor 1
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	M05
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 Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	<i>E. coli</i> derived recombinant human full length TIMP-1 (Cys24-Ala207)

**External Database
Links**

UniProt:

[P01033](#) [Related reagents](#)

Entrez Gene:

[7076](#) TIMP1 [Related reagents](#)

Synonyms

CLGI, TIMP

Fusion Partners

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

Specificity

Mouse anti Human TIMP-1 antibody, clone M05, recognizes Tissue Inhibitor of Metalloproteinases 1 (TIMP-1) also known as metalloproteinase inhibitor 1, EPA and fibroblast collagenase inhibitor.

TIMP-1 is a member of the TIMP family of proteins that assist in regulating the activity of matrix metalloproteinases (MMPs) and it is mainly expressed by macrophages and fibroblasts. TIMP proteins are specific endogenous inhibitors that bind to the active site of MMPs in a stoichiometric 1:1 molar ratio, thereby blocking access to ECM substrates ([Kapoor et al. 2016](#), [Robert et al. 2016](#)). The TIMP proteins including TIMP-1 have poor specificity for any particular MMP and each can inhibit multiple MMPs with differing efficacies ([Cui et al. 2017](#)).

The ratio of MMP and TIMP often determine the extent of ECM protein degradation and tissue remodeling. An imbalance of this ratio such as with decreased expression of TIMP can result in various pathological conditions, most notably, heart failure, osteoarthritis and cancer. Low levels of TIMP have also been associated with slow-to-heal wounds and venous wounds ([Cui et al. 2017](#)).

The biotinylated Mouse anti Human TIMP-1 antibody, clone M05 (MCA62779B) can be used as a detection antibody in a sandwich ELISA with the purified Mouse anti Human TIMP-1 antibody, clone M03 ([MCA6278GA](#)) as the capture 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 #10041 available at:
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory

For research purposes only

Related Products

Recommended Useful Reagents

[MOUSE ANTI HUMAN TIMP-1 \(MCA6278GA\)](#)

ELISA Matched Pair - Capture Antibody

[MOUSE ANTI HUMAN TIMP-1 \(MCA6278GA\)](#)

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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

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