Datasheet: MCA2734GA

BATCH NUMBER 150499

Description:	MOUSE ANTI HUMAN MMP-3
Specificity:	MMP-3
Other names:	STROMELYSIN-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	1B4
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
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			

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.

(1)**This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.Sodium citrate buffer pH 6.0 is recommended for this purpose.**

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide (NaN_3)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Ovalbumin conjugated synthetic peptide corresponding to a region within the C-terminus of human MMP-3.
External Database Links	**UniProt:** P08254 Related reagents **Entrez Gene:** 4314 MMP3 Related reagents
Synonyms	STMY1
RRID	AB_2146579
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the Ag8563 myeloma cell line.
Specificity	**Mouse anti Human MMP-3 antibody, clone 1B4** recognizes human matrix metalloproteinase 3, also known as MMP-3, stromelysin-1 or transin-1. MMP-3 in its pro-form is a 477 amino acid ~54kDa zinc dependent endopeptidase processed to a 378 amino acid, ~45 kDa peptide in the mature form containing 4 hemopexin-like repeats. MMPs are also involved in cell proliferation, migration, differentiation and apoptosis (Jana *et al.* 2012). Most MMP's are synthesised as inactive zymogens and a propeptide region must be cleaved off before the enzyme becomes active. Their expression is increased dramatically in a variety of cancer types, where it indicates invasive disease and a poor prognosis (Holmberg *et al.* 2013). MMP-3 can degrade proteoglycan, fibronectin, laminin, and type IV collagen, but not interstitial type I collagen (Wilhelm *et al.* 1993). It can activate other MMP's and may be involved in the repair processes of the heart after myocardial infarction (Wang *et al.* 2011). Mouse anti human MMP-3 antibody, clone 1B4 has been used successfully for the identification of MMP-3 in gastric cancer by both Western blotting and immunohistochemistry (Murray *et al.* 1998)
Histology Positive Control Tissue	Gastric carinoma
Western Blotting	MCA2734GA detects a band of approximately 50kDa in cell lysates.
References	1. Murray, G.I. *et al.* (1998) Matrix metalloproteinases and their inhibitors in gastric cancer.

Gut. 43 (6): 791-7.
2. Lyall, M.S. *et al.* (2006) Profiling markers of prognosis in colorectal cancer. Clin Cancer Res. 12 (4): 1184-91.
3. Juica, N.E. *et al.* (2017) *Neisseria gonorrhoeae* Challenge Increases Matrix Metalloproteinase-8 Expression in Fallopian Tube Explants. Front Cell Infect Microbiol. 7: 399.

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 Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2734GA 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
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

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'M367379:200529'

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