## MMP2 / Collagenase-Type-IV-A Monoclonal Mouse Antibody (MMP2/1501)



## **Product Description**

This antibody recognizes a protein of 72 kDa, which is identified as MMP2. The matrix metalloproteinases (MMP) are a family of peptidase enzymes responsible for the degradation of extracellular matrix components, including collagen, gelatin, Fibronectin, Laminin and proteoglycan. Transcription of MMP genes is differentially activated by phorbol ester, lipopolysaccharide (LPS) or staphylococcal enterotoxin B (SEB). MMP catalysis requires both calcium and zinc. MMP-2 (also designated type IV collagenase) cleaves collagen types IV,V, VII and X and gelatin type I. Activation of MMP-2 secretion requires the Ras signaling pathway.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1501, Anti-Collagenase-Type-IV-A (MMP2/1501)

## Product attributes

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Product attributes				
Antibody number	#1501			
Antibody reactivity (target)	Collagenase-Type-IV-A, MMP2			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	MMP2/1501			
Isotype	lgG1			
Molecular weight	72 kDa (Pro); 63 kDa (cleaved)			
Synonyms	Type IV collagenase, CLG4A, Collagenase Type 4 alpha, Collagenase type IV A, Gelatinase A, Gelatinase alpha, Gelatinase neutrophil, Matrix metalloproteinase-2, MMP2, MONA, Neutrophil gelatinase, PEX, TBE-1			
Human gene symbol	MMP2			
Entrez gene ID	4313			
SwissProt	P08253			
Unigene	513617			
Immunogen	Recombinant human MMP2 protein fragment (aa444-575) (exact sequence is proprietary)			
Verified antibody applications	WB (verified)			
Antibody target cellular localization	Secreted (extracellular)			
Species reactivity	Human			
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user			
Positive control	U-138 MG or U-87 MG cells. Placenta			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			
Regulatory status	For research use only (RUO)			
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide			
Validated in protein array	Monospecific			
Antibody research areas	Extracellular matrix, Proteases			
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.			

Email: techsupport@biotium.com

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified,	N/A	N/A	N/A	

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