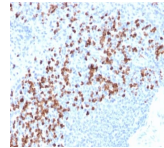


# MMP9 Recombinant Monoclonal Mouse Antibody (rMMP9/1769)



## Product Description

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-9 (also designated 92 kDa type IV collagenase or gelatinase B) has been shown to degrade bone collagens in concert with MMP-1 (also designated interstitial collagenase, fibroblast collagenase or collagenase-1), and cysteine proteases and may play a role in bone osteoclastic resorption. MMP-1 is down-regulated by p53, and abnormality of p53 expression may contribute to joint degradation in rheumatoid arthritis by regulating MMP-1 expression.

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 [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

## Product attributes

Antibody number	#2176
Antibody reactivity (target)	MMP9
Antibody type	Primary
Host species	Mouse
Clonality	Recombinant Monoclonal
Clone	rMMP9/1769
Isotype	IgG1
Molecular weight	92 kDa
Synonyms	82 kDa matrix metalloproteinase-9; 92 kDa gelatinase; 92 kDa type IV collagenase; CLG 4B; CLG4B; Collagenase Type 4 beta; Collagenase type IV 92 KD; EC 3.4.24.35; Gelatinase 92 KD; Gelatinase B; Gelatinase beta; GelatinaseB; GELB; Macrophage gelatinase; MANDP2; Matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase); Matrix Metalloproteinase 9; MMP 9; MMP9; Type V collagenase
Human gene symbol	MMP9
Entrez gene ID	4318
SwissProt	P14780
Unigene	297413
Immunogen	Recombinant full-length human MMP-9 protein
Verified antibody applications	IHC (FFPE) (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. Immunohistology (formalin): 0.5-1 ug/mL for 30 minutes at RT, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined by user
Positive control	U937 cells. Spleen or heart
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
Antibody research areas	Extracellular matrix, Proteases

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

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