

## Datasheet: PHP257

Description:	<b>RECOMBINANT HUMAN MMP-1</b>
Name:	MMP-1
Other names:	INTERSTITIAL COLLAGENASE
Format:	Rec. Protein
Product Type:	Recombinant Protein
Quantity:	10 µg

## **Product Details**

Applications	This product has been reported to work in the following applications. This inform							
	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			
	Functional Assays							
	Where this product has n	ot been te	sted for u	ise in a particular	technique this does not			
	necessarily exclude its use in such procedures. Suggested working dilutions are ç							
	a guide only. It is recomm system using appropriate	nended that negative/	at the use positive c	r titrates the prode controls.	uct for use in their own			
Target Species	Human							
Product Form	Purified recombinant prot	ein - Iyoph	ilized					
Reconstitution	Reconstitute with 20ul dis	stilled wate	er					
	Slow to dissolve.							
	Care should be taken du	be taken during reconstitution as the protein may appear as a film at the						
	bottom of the vial. Bio-Ra	nd recomm	end that	the vial is gently r	nixed for about 10 minutes			
	after reconstitution for be	tter solubii	ity.					
Preparation	Purified recombinant MM	P-1 expres	ssed in <i>E</i>	.coli				
Buffer Solution	Sodium phosphate							
	Calcium chloride							
Preservative Stabilisers	None present							
Carrier Free	Yes							

Endotoxin Level	< 1.0 EU/ug
Approx. Protein Concentrations	0.5 mg/ml after reconstitution
External Database Links	UniProt:         P03956       Related reagents         Entrez Gene:         4312       MMP1         Related reagents
Synonyms	CLG
Product Information	Recombinant Human MMP-1 antigen produced in <i>E. coli</i> corresponds to human MMP-1 (matrix metalloproteinase 1) containing the entire catalytic N-terminal domain and the C-terminal domain. MMP-1 otherwise known as interstitial collagenase, is a member of a family of secreted zinc-dependent endoproteases, which play a role in the degradation of extracellular matrix (ECM) components, including both fibrillar and non-fibrillar collagens, laminin, basement membrane glycoprotein and fibronectin. MMP-1 specifically cleaves types I, II, III, VII and X collagens, and also interacts with and cleaves the secreted viral Tat protein during HIV infection, resulting in a decrease in neuronal Tat's mediated neurotoxicity. MMP-1 is overexpressed in invasive melanoma (Ye <i>et al.</i> 2001), colorectal (Hinoda <i>et al.</i>
	2001) and oesophageal (Yamashita <i>et al.</i> 2001) cancers, and has been implicated in arthritis, atherosclerotic lesion formation, and in the repair processes of the heart after myocardial infarction (Creemers <i>et al.</i> 2001).
Activity	MMP-1 activity was measured by its ability to cleave a chromogenic peptide MMP-1 substrate at room temperature. At an MMP-1 concentration of 2.5 $\mu$ g/ml, 50% cleavage was achieved at an incubation time of approximately 25 mins.
Purity	>90% by SDS PAGE and HPLC analysis
Storage	Prior to reconstitution store at +4°C. After reconstitution store at -20°C. 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	3 months from date of reconstitution
Health And Safety Information	Material Safety Datasheet documentation #10330 available at: 10330: <u>https://www.bio-rad-antibodies.com/uploads/MSDS/10330.pdf</u>
Regulatory	For research purposes only

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batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M391308:211008'

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