

Recombinant Mouse Matrix Metalloproteinase 9

Cat. No. Mmp9-417M **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Species	Mouse
Source	Mammalian Cells
Description	Matrix metalloproteinase 9, also known as MMP9, is a biological enzyme that is a member of the matrix metalloproteinases (MMPs). MMP9 is thought to play a critical role in tumor cell invasion, breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. MMP-9 is secreted from cells and, once activated, is thought to degrade collagen in the extracellular matrix. MMP-9 is one of the major proteases produced by osteoclasts and possibly plays a role in osteoclastic bone resorption.
Molecular Weight	The predicted molecular weight of Recombinant Mouse MMP-9 is Mr 78.4 kDa. However, the actual molecular weight as observed by migration on SDS Page is Mr 105-110 kDa.
State Of Matter	Solution.
Purity	>90% by SDS Page and analyzed by silver stain.
Formulation	Supplied as a 0.2 µm filtered solution of TCNB (50 mM Tris-HCl, pH 7.5, 10 mM CaCl ₂ , 150 mM NaCl, 0.05% Brij 35) at a concentration of 0.2 mg/mL.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Endotoxin	<1.0 EU/g as determined by the LAL method.
Biological Activity	The specific activity, measured with 10 µM ES001 and 20 ng enzyme in 100 µL of TCNB (50 mM Tris-HCl, pH 7.5, 10 mM CaCl ₂ , 150 mM NaCl, 0.05% Brij 35) at room temperature, is > 1,500 pmoles/min/µg.
Storage And Stability	This protein is stable for one month when stored sterile at -20°C or for three months when stored at -70°C in a manual defrost freezer. Avoid Repeated Freeze Thaw Cycles.
GENE INFORMATION	
Gene Name	Mmp9 matrix metalloproteinase 9 [Mus musculus]
Synonyms	Mmp9; matrix metalloproteinase 9; Clg4b; MMP-9; B/MMP9; AW743869; pro-MMP-9; Gel B; gelatinase B; 92kD gelatinase; 92kDa gelatinase; OTTMUSP00000001145; collagenase type IVB; 92kD type IV collagenase; 92kDa type IV collagenase; matrix metalloproteinase 9; EC 3.4.24.35
Gene ID	17395
mRNA Refseq	NM_013599
Protein Refseq	NP_038627
UniProt ID	P41245
Chromosome Location	2 H1-H2; 2 96.0 cM
Pathway	Bladder cancer; Leukocyte transendothelial migration; Pathways in cancer

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Function

calcium ion binding; hydrolase activity; metal ion binding; metalloendopeptidase activity; metalloendopeptidase activity; metallopeptidase activity; peptidase activity; protein binding; zinc ion binding

PDB rendering based on 1itv.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA