

Recombinant Mouse Matrix Metalloproteinase 9

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

SPECIFICATION

Species	Mouse
Source	Mammalian Cells
Description	<p>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.</p>
Molecular Weight	<p>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.</p>
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.
Endotoxin	<1.0 EU/g as determined by the LAL method.

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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 CaCl₂, 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

Function calcium ion binding; hydrolase activity; metal ion binding; metalloendopeptidase

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activity; metalloendopeptidase activity; metallopeptidase activity; peptidase activity;
protein binding; zinc ion binding

**PDB rendering based
on 1itv.**

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