Recombinant Human Matrix Metallopeptidase 9

Cat. No. MMP9-709H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human matrix metallopeptidase 9 was expressed in*NSO Cells.*
Species	Human
Source	Mammalian Cells
Description	Matrix metalloproteinases (MMPs) are a family of zinc-dependent endopeptidases that degrade components of the extracellular matrix (ECM) and play essential roles in various physiological processes such as morphogenesis, differentiation, angiogenesis and tissue remodeling, as well as pathological processes including inflammation, arthritis, cardiovascular diseases, pulmonary diseases and tumor invasion. MMPs are synthesized as enzymogen and converted to active form by other MMPs or extracellular proteinases. MMP9, also known as 92-kDa gelatinase B/type IV collagenase, is secreted from neutrophils, macrophages, and a number of transformed cells, and is the most complex family member in terms of domain structure and regulation of its activity. It contains a fibronectin-like domain, which functions in the binding of gelatin, a unique serine/proline/threonine-rich collagen type V-like domain probably serving as attachment sites of multiple O-linked oligosaccharides and a carboxyl terminal hemopexin-like domain. This enzyme degrades various substrates including gelatin, collagen types IV and V, and elastin.
Assay	>95% (SDS-PAGE).
Form	Buffered aqueous solution.

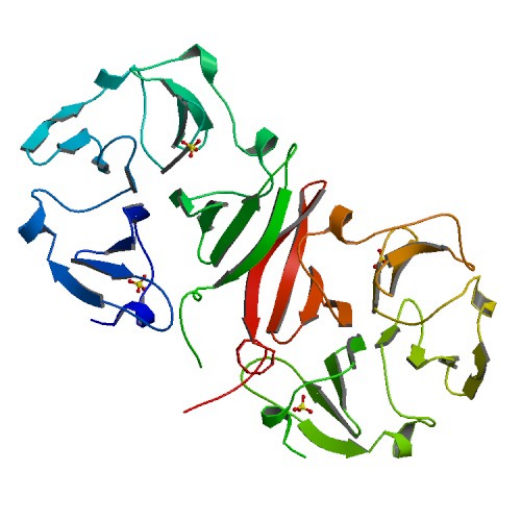
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Mol wt	Apparent mol wt ~93 kDa.
Shipped In	Dry ice.
Storage Temp	−70℃.
Personal Protective Equipment	Eyeshields, Gloves, half-mask respirator (EU), half-mask respirator (US), multi-purpose combination respirator cartridge (US)

GENE INFORMATION

Gene Name	MMP9 matrix metallopeptidase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase) [Homo sapiens]
Synonyms	MMP9; matrix metallopeptidase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase); GELB; CLG4B; MMP-9; MANDP2; MMP-9; EC 3.4.24.35; OTTHUMP00000031674; 92 kDa gelatinase 3; 92 kDa type IV collagenase; Gelatinase B; macrophage gelatinase 2; type V collagenase
Gene ID	4318
mRNA Refseq	NM_004994
Protein Refseq	NP_004985
MIM	120361
UniProt ID	P14780
Chromosome Location	20q12-q13

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

Pathway	Bladder cancer; Pathways in cancer; Leukocyte transendothelial migration
Function	calcium ion binding; collagen binding; metalloendopeptidase activity; peptidase activity; 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