

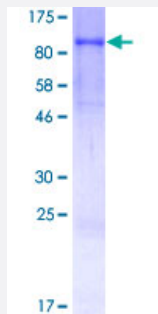
Full-Length

MMP9 (Human) Recombinant Protein (P01)

Catalog # H00004318-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human MMP9 full-length ORF (AAH06093.1, 1 a.a. - 707 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MSLWQPLVLVLLVLGCCFAAPRQRQSTLVLFPGDLRTNLTDRQLAEEYLRYGYTRVAEMRGES
KSLGPALLLLQKQLSLPETGELDSATLKAMRTPRCGVPDLGRFQTFEGDLKWHHHNITYWIQNY
EDLPRAVIDDAFARAFALWSAVTPLTFTRVYSRDADIVIQGVAEHGDGYFPDGDGLLAHAFPP
GPGIQGDAHFDDELWSLGKGVVVPTRFGNADGAACHFPFIFEGRSYSACTTDGRSDGLPWCS
TTANYDTDDRFGFCPSERLYTRDGNADGKPCQPFIFQGGSYSACTTDGRSDGYRWCATTANYD
RDKLFGFCPTRADSTVMGGNSAGELCVFPFTFLGKEYSTCTSEGRGDGRLWCATTSNFDSDDK
WGFCPDQGYSLFLVAAHEFGHALGLDHSSVPEALMYPMYRFTEGPPLHKDDVNGIRHLYGPRPE
PEPRPPTTTTPQPTAPPTVCPTGPPTVHPSERPTAGPTGPPSAGPTGPPTAGPSTATTVPLSPVD
DACNVNIFDAIAEIGNQLYLFKDGKYWRFSEGRGSRPQGPFLIADKWPALPRKLDVFEEPLSKKL
FFFSGRQVWVYTGASVLGPRRLDKLGLGADVAQVTGALRSGRGKMLLFSGRRLWRFDVKAQM
VDPRSASEVDRMFPGVPLDTHDVFQYREKAYFCQDRFYWRVSSRSELNQVDQVGYVTDILQC
PED

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

103.4

Interspecies Antigen Sequence

Mouse (72)

Preparation Method

[in vitro wheat germ expression system](#)

Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — MMP9

Entrez GeneID	4318
GeneBank Accession#	BC006093
Protein Accession#	AAH06093.1
Gene Name	MMP9
Gene Alias	CLG4B, GELB, MMP-9
Gene Description	matrix metallopeptidase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)
Omim ID	120361
Gene Ontology	Hyperlink

Gene Summary

Proteins of the matrix metalloproteinase (MMP) family are involved in the 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. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. The enzyme encoded by this gene degrades type IV and V collagens. Studies in rhesus monkeys suggest that the enzyme is involved in IL-8-induced mobilization of hematopoietic progenitor cells from bone marrow, and murine studies suggest a role in tumor-associated tissue remodeling. [provided by RefSeq]

Other Designations

92kD type IV collagenase|OTTHUMP00000031674|gelatinase B|macrophage gelatinase|matrix metalloproteinase 9|matrix metalloproteinase 9 (gelatinase B, 92kD gelatinase, 92kD type IV collagenase)|matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kD

Pathway

- [Bladder cancer](#)
- [Leukocyte transendothelial migration](#)
- [Pathways in cancer](#)

Disease

- [Acquired Immunodeficiency Syndrome](#)
- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Airway Remodeling](#)
- [Alcoholism](#)
- [Alzheimer disease](#)
- [Amyotrophic lateral sclerosis](#)
- [Aneurysm](#)
- [Angina](#)
- [Angina Pectoris](#)
- [Aortic Aneurysm](#)
- [Arteriosclerosis](#)

- [Arthritis](#)
- [Asthma](#)
- [Astrocytoma](#)
- [Atherosclerosis](#)
- [Atrial Fibrillation](#)
- [Behcet Syndrome](#)
- [Bipolar Disorder](#)
- [Brain Ischemia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchiectasis](#)
- [Carcinoma](#)
- [Cardiomyopathies](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Carotid Artery](#)
- [Carotid Artery Diseases](#)
- [Carotid Stenosis](#)
- [Cerebral Hemorrhage](#)
- [Cerebral Infarction](#)
- [Cerebrovascular Accident](#)
- [Cerebrovascular Disorders](#)
- [Chorioamnionitis](#)
- [Chronic Disease](#)
- [Cicatrix](#)

- [Cleft Lip](#)
- [Cleft Palate](#)
- [Cognition](#)
- [Colitis](#)
- [Colorectal Neoplasms](#)
- [Connective Tissue Diseases](#)
- [Constriction](#)
- [Coronary Aneurysm](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Coronary Restenosis](#)
- [Crohn Disease](#)
- [Delayed Graft Function](#)
- [Dementia](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetic Angiopathies](#)
- [Diabetic Nephropathies](#)
- [Diabetic Retinopathy](#)
- [Disease](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Ductus Arteriosus](#)
- [Duodenal Ulcer](#)
- [Edema](#)

- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Epilepsy](#)
- [Esophageal Neoplasms](#)
- [Exfoliation Syndrome](#)
- [Fetal Diseases](#)
- [Fetal Growth Retardation](#)
- [Fetal Membranes](#)
- [Fibrosis](#)
- [Fractures](#)
- [Gastritis](#)
- [Genetic Predisposition to Disease](#)
- [Giant Cell Arteritis](#)
- [Gingivitis](#)
- [Glaucoma](#)
- [Glomerulonephritis](#)
- [Graft Occlusion](#)
- [Guillain-Barre Syndrome](#)
- [Heart Diseases](#)
- [Heart Failure](#)
- [Helicobacter Infections](#)
- [Hemorrhage](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [Hypersensitivity](#)
- [Hypertension](#)

- [Hypertrophy](#)
- [Infant](#)
- [Infection](#)
- [Inflammation](#)
- [Intervertebral Disk Displacement](#)
- [Intracranial Aneurysm](#)
- [Intracranial Arteriosclerosis](#)
- [Intracranial Hemorrhages](#)
- [Kidney Failure](#)
- [Leiomyoma](#)
- [Leukoaraiosis](#)
- [Liver Cirrhosis](#)
- [Liver Neoplasms](#)
- [Long QT syndrome](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Macular Degeneration](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Metabolic Syndrome X](#)
- [Metaplasia](#)
- [Mouth Neoplasms](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Multiple Sclerosis](#)

- [Musculoskeletal Diseases](#)
- [Myocardial Infarction](#)
- [Myopia](#)
- [Nasal Polyps](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neovascularization](#)
- [Neuropsychological Tests](#)
- [Obesity](#)
- [Obstetric Labor](#)
- [Oral Submucous Fibrosis](#)
- [Osteoarthritis](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Paraparesis](#)
- [Pelvic Organ Prolapse](#)
- [Periodontal Attachment Loss](#)
- [Periodontitis](#)
- [Peripheral Vascular Diseases](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)

- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Pulmonary Emphysema](#)
- [Recurrence](#)
- [Rheumatoid Nodule](#)
- [Schizophrenia](#)
- [Scleroderma](#)
- [Seizures](#)
- [Sinusitis](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Spinal Diseases](#)
- [Stomach Neoplasms](#)
- [Stomach Ulcer](#)
- [Stroke](#)
- [Subarachnoid Hemorrhage](#)
- [Thrombosis](#)
- [Trachoma](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Diseases](#)
- [Uterine Neoplasms](#)
- [Vaginitis](#)
- [Ventricular Dysfunction](#)

- [Ventricular Outflow Obstruction](#)
- [Vertebral Artery Dissection](#)