

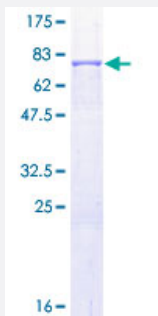
Full-Length

MMP1 (Human) Recombinant Protein (P01)

Catalog # H00004312-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human MMP1 full-length ORF (NP_002412.1, 1 a.a. - 469 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MHSFPPLLLLLFWGVVSHSFPATLETQEQDVLVQKYLEKYNLKNDGRQVEKRRNSGPVVEKL
KQMQUEFFGLKVTGKPDATLKVMMKQPRCGVPDVAQFVLTEGNPRWEQTHLTYRIENYTPDLPR
DVDHAIKAFQLWSNVTPLTFTKVSEGGADIMISFVRGDHRDNSPFDGPGGNLAHAFQPGPGIGG
DAHFDEDERWTNNFREYNLHRVAAHELGHSLGLSHSTDIGALMYPSTYFSGDVQLAQQDDIGQAI
YGRSQNPVQPIGPQTPKACDSKLTDAITIRGEVMFFKDRFYMRTPNFYPEVELNFISVFWPQLP
NGLEAAAYEFADRDEVRFKGNKYWAVQGQNVLHGYPKDIYSSFGFPRTVKHIDAALSEENTGKTY
FFVANKYWRYDEYKRSMGPGPKMIAHDFPGIGHKVDVFMKDGFFYFFHGTQYKFDPKTKRIL
TLQKANSWFNCRKN

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

80.4

Interspecies Antigen Sequence

Mouse (59); Rat (58)

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 — MMP1

Entrez GeneID	4312
GeneBank Accession#	NM_002421.2
Protein Accession#	NP_002412.1
Gene Name	MMP1
Gene Alias	CLG, CLGN
Gene Description	matrix metalloproteinase 1 (interstitial collagenase)
Omim ID	120353 606963
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. This gene encodes a secreted enzyme which breaks down the interstitial collagens, types I, II, and III. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. Alternative splicing results in multiple transcript variants.[provided by RefSeq]
Other Designations	fibroblast collagenase interstitial collagenase matrix metalloproteinase 1 matrix metalloproteinase 1 matrix metalloproteinase 1 (interstitial collagenase)

Pathway

- [Bladder cancer](#)
- [Pathways in cancer](#)
- [PPAR signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Adenomatous Polyps](#)
- [Aggressive Periodontitis](#)
- [Airway Obstruction](#)
- [alpha 1-Antitrypsin Deficiency](#)
- [Alpha-1-antitrypsin deficiency](#)
- [Alveolar Bone Loss](#)
- [Alzheimer disease](#)
- [Amyotrophic lateral sclerosis](#)
- [Anoxia](#)
- [Aortic Aneurysm](#)
- [Arthritis](#)
- [Asthma](#)
- [Astrocytoma](#)
- [Atherosclerosis](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchiectasis](#)

- [Bronchitis](#)
- [Carcinoma](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Carotid Artery](#)
- [Carotid Artery Diseases](#)
- [Carotid Stenosis](#)
- [Celiac Disease](#)
- [Cervical Intraepithelial Neoplasia](#)
- [Cholangitis](#)
- [Chorioamnionitis](#)
- [Chronic Disease](#)
- [Chronic Periodontitis](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Colorectal Neoplasms](#)
- [Connective Tissue Diseases](#)
- [Constriction](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Crohn Disease](#)
- [Cystic fibrosis](#)
- [Dementia](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)

- [Diabetic Angiopathies](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Ductus Arteriosus](#)
- [Edema](#)
- [Emphysema](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Epidermolysis Bullosa](#)
- [Esophageal Neoplasms](#)
- [Exfoliation Syndrome](#)
- [Eye Diseases](#)
- [Fetal Diseases](#)
- [Fetal Membranes](#)
- [Fibrosis](#)
- [Genetic Predisposition to Disease](#)
- [Gingival Overgrowth](#)
- [Glaucoma](#)
- [Glioblastoma](#)
- [Graft Occlusion](#)
- [Head and Neck Neoplasms](#)
- [Hearing Loss](#)
- [Helicobacter Infections](#)
- [Hepatitis C](#)
- [Hypertension](#)

- [Hypertrophy](#)
- [Idiopathic Pulmonary Fibrosis](#)
- [Infant](#)
- [Infection](#)
- [Inflammation](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Leiomyoma](#)
- [Lichen Planus](#)
- [Liver Cirrhosis](#)
- [Liver Neoplasms](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Metabolic Syndrome X](#)
- [Mitral Valve Insufficiency](#)
- [Mitral Valve Prolapse](#)
- [Mouth Neoplasms](#)
- [Multiple Sclerosis](#)
- [Musculoskeletal Diseases](#)
- [Myocardial Infarction](#)
- [Myopia](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)

- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Obesity](#)
- [Obstetric Labor](#)
- [Oral Submucous Fibrosis](#)
- [Osteoarthritis](#)
- [Osteolysis](#)
- [Osteomyelitis](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Papillomavirus Infections](#)
- [Parkinson disease](#)
- [Periodontal Attachment Loss](#)
- [Periodontal Pocket](#)
- [Periodontitis](#)
- [Peripheral Vascular Diseases](#)
- [Pneumonia](#)
- [Polycystic Ovary Syndrome](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Prosthesis Failure](#)

- [Prosthesis-Related Infections](#)
- [Pruritus](#)
- [Pulmonary Disease](#)
- [Pulmonary Emphysema](#)
- [Renal Insufficiency](#)
- [Rheumatoid Nodule](#)
- [Rhinitis](#)
- [Sarcoidosis](#)
- [Scleroderma](#)
- [Skin Diseases](#)
- [Spinal Diseases](#)
- [Stomach Neoplasms](#)
- [Stomach Ulcer](#)
- [Subarachnoid Hemorrhage](#)
- [Thrombosis](#)
- [Tongue Neoplasms](#)
- [Tooth Loss](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Urinary Incontinence](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Neoplasms](#)
- [Varicose Veins](#)
- [Werner syndrome](#)