

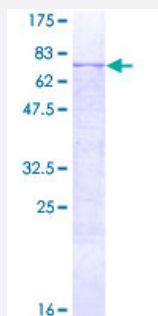
Full-Length

MMP12 (Human) Recombinant Protein (P01)

Catalog # H00004321-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human MMP12 full-length ORF (NP_002417.2, 1 a.a. - 470 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MKFLILLLLQATASGALPLNSSTSLEKNNVLFGERYLEKFYGLEINKLPVTKMKYSGNLMKEKIQEM
QHFLGLKVGTGQLDTSTLEMMHAPRCGVPDVHHFREMPGGPVWRKHYYTYRINNYTPDMNREDVD
YAIRKAFQVWSNVTPLKFSKINTGMADILVVFARGAHGDFHAFDGGKILAHAFGPGSGIGGDAHF
DEDEFWTTSHSGGTNLFLTAVHEIGHSLGLGHSSDPKAVMFPTYKYVDINTFRLSADDIRGIQSLYGD
PKENQRLPNPDNSEPALCDPNLSFDAVTTVGNKIFFFKDRFFWLKVSEPKTSVNLISLWPTLP
SGIEAAYEIEARNQVFLFKDDKYWLISNLRPEPNYPKSIHSFGFPNFVKKIDAAVFNPRFYRTYFFVD
NQWRYDERRQMMDPGYPKLITKNFQGIGPKIDAVFYSKNKYYYFFQGSNQFEYDFLLQRITKTLKS
NSWFGC

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

80.4

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 — MMP12

Entrez GeneID[4321](#)**GeneBank Accession#**[NM_002426.2](#)**Protein Accession#**[NP_002417.2](#)**Gene Name**

MMP12

Gene Alias

HME, MGC138506, MME

Gene Description

matrix metalloproteinase 12 (macrophage elastase)

Omim ID[601046](#)**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. It is thought that the protein encoded by this gene is cleaved at both ends to yield the active enzyme, but this processing has not been fully described. The enzyme degrades soluble and insoluble elastin. It may play a role in aneurysm formation and studies in mice suggest a role in the development of emphysema. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. [provided by RefSeq]

Other Designations

macrophage elastase|macrophage metalloelastase|matrix metalloproteinase 12|matrix metalloproteinase 12 (macrophage elastase)

Disease

- [Acute Disease](#)
- [Adenocarcinoma](#)
- [alpha 1-Antitrypsin Deficiency](#)
- [Alpha-1-antitrypsin deficiency](#)
- [Amyotrophic lateral sclerosis](#)
- [Anoxia](#)
- [Aortic Aneurysm](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Carotid Artery](#)
- [Chorioamnionitis](#)
- [Chronic Disease](#)
- [Colorectal Neoplasms](#)
- [Coronary Aneurysm](#)
- [Coronary Artery Disease](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Edema](#)
- [Endometriosis](#)

- [Esophageal Neoplasms](#)
- [Fetal Membranes](#)
- [Fibrosis](#)
- [Genetic Predisposition to Disease](#)
- [Glomerulonephritis](#)
- [Hepatitis C](#)
- [Kidney Failure](#)
- [Liver Cirrhosis](#)
- [Lung Neoplasms](#)
- [Metabolic Syndrome X](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Multiple Sclerosis](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasms](#)
- [Obstetric Labor](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Periodontitis](#)
- [Pre-Eclampsia](#)
- [Premature Birth](#)
- [Pulmonary Disease](#)
- [Renal Insufficiency](#)
- [Stomach Neoplasms](#)
- [Subarachnoid Hemorrhage](#)
- [Tuberculosis](#)

- [Urinary Bladder Neoplasms](#)
- [Varicose Ulcer](#)
- [Werner syndrome](#)