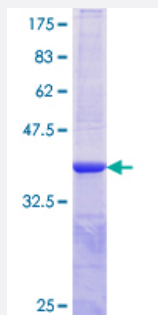


MMP12 (Human) Recombinant Protein (Q01)

Catalog # H00004321-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human MMP12 partial ORF (NP_002417.2, 292 a.a. - 401 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	TTVGNKIFFFKDRFFWLKVSRPKTSVNLISLWPTLPSGIEAAYEIEARNQVFLFKDDKYWLISNLRPEPNYPKSIHSFGFPNFVKKIDAAVFNPRFYRTYFFVDNQYW
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	37.84
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](#)

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](#)