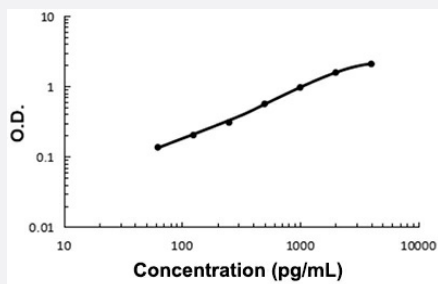


MMP12 (Human) ELISA Kit

Catalog # KA4053 Size 1 Kit

Applications



The standard curve is for the purpose of demonstration only and should not be used to calculate unknowns. A standard curve should be generated each time the assay is performed.

Specification

Product Description	MMP12 (Human) ELISA Kit is a sandwich enzyme immunoassay for the quantitative measurement of human MMP12.
Suitable Sample	Cell culture supernates, Plasma (heparin), Serum
Sample Volume	100 uL
Label	HRP-conjugated
Detection Method	Colorimetric
Assay Type	Quantitative
Calibration Range	62.5 to 4000 pg/mL
Reactivity	Human
Regulation Status	For research use only (RUO)
Quality Control Testing	Standard Curve The standard curve is for the purpose of demonstration only and should not be used to calculate unknowns. A standard curve should be generated each time the assay is performed.
Storage Instruction	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles.

Applications

- Quantification

Gene Info — MMP12

Entrez GeneID [4321](#)

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)

Publication Reference

- [Cardiovascular protection in females linked to estrogen-dependent inhibition of arterial stiffening and macrophage MMP12.](#)

Liu SL, Bajpai A, Hawthorne EA, Bae Y, Castagnino P, Monslow J, Puré E, Spiller KL, Assoian RK.
JCI Insight 2019 Jan; 4(1):122742.

Application: ELISA, Human, M0 cells

- [MMP-12 and S100s in saliva reflect different aspects of periodontal inflammation.](#)

Holmström SB, Lira-Junior R, Zwicker S, Majster M, Gustafsson A, Åkerman S, Klinge B, Svensson M, Boström EA.
Cytokine 2019 Jan; 113:155.

Application: ELISA, Human, Salivary

- [Gingival Tissue Inflammation Promotes Increased Matrix Metalloproteinase-12 Production by CD200Rlow Monocyte-Derived Cells in Periodontitis.](#)

Björnfort Holmström S, Clark R, Zwicker S, Bureik D, Kvedaraite E, Bernasconi E, Nguyen Hoang AT, Johannsen G, Marsland BJ, Boström EA, Svensson M.

Journal of immunology 2017 Dec; 199(12):4023.

Application: Quant, Human, Monocytes-derived cells

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](#)
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- [Liver Cirrhosis](#)
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- [Mucocutaneous Lymph Node Syndrome](#)
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- [Neoplasm Invasiveness](#)
- [Neoplasms](#)
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- [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](#)