



MMP12 peptide (DAG-P0824)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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 MMPs 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, Jul 2008]
Specificity	Found in alveolar macrophages but not in peripheral blood monocytes.
Purity	> 95 % by SDS-PAGE.
Conjugate	Unconjugated
Applications	WB, ELISA
Sequence Similarities	Belongs to the peptidase M10A family. Contains 4 hemopexin-like domains.
Format	Liquid
Buffer	Preservative: None Constituents: 0.001% Tween 20, 30mM HEPES, 2mM EDTA, 150mM Sodium chloride, pH 6.75
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Preservative: None Constituents: 0.001% Tween 20, 30mM HEPES, 2mM EDTA, 150mM Sodium chloride, pH 6.75

GENE INFORMATION

Gene Name	MMP12 matrix metalloproteinase 12 (macrophage elastase) [Homo sapiens (human)]
Official Symbol	MMP12
Synonyms	MMP12; matrix metalloproteinase 12 (macrophage elastase); ME; HME; MME; MMP-12; macrophage metalloelastase; matrix metalloproteinase 12 (macrophage elastase);
Entrez Gene ID	4321
mRNA Refseq	NM_002426.4
Protein Refseq	NP_002417.2
UniProt ID	P39900
Chromosome Location	11q22.3
Pathway	Collagen degradation, organism-specific biosystem; Degradation of the extracellular matrix, organism-specific biosystem; Extracellular matrix organization, organism-specific biosystem; Matrix Metalloproteinases, organism-specific biosystem;
Function	calcium ion binding; endopeptidase activity; metalloendopeptidase activity; zinc ion binding;