

Product datasheet for **TP723882**

MMP1 (NM_002421) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human matrix metalloproteinase 1 (interstitial collagenase) (MMP1), transcript variant 1
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	Human MMP-1, the region of Phe20-Asn469, from gene Accession# NM_002421
Tag:	N-His
Predicted MW:	54 kDa
Concentration:	lot specific
Purity:	>90%, as determined by Coomassie stained SDS-PAGE.
Buffer:	25 mM TRIS, 10 mM CaCl ₂ , 150 mM NaCl, pH 7.5
Bioactivity:	Human MMP-1 cleaves the peptide substrate Mca-KPLGL-Dpa-AR-NH ₂ with an activity above 200 pmol/min/μg.
Endotoxin:	Less than 1.0 EU per μg of protein as determine by the LAL method
Storage:	Store at -80°C.
Stability:	Unopened vial can be stored between 2°C and 8°C for up to 2 weeks, at -20°C for up to 6 months, or at -70°C or below until the expiration date. Aliquots can be stored between 2°C and 8°C for up to one week and stored at -20°C or colder for up to 3 months. Avoid repeated freeze/thaw cycles.
RefSeq:	<u>NP_002412</u>
Locus ID:	4312
UniProt ID:	<u>P03956</u>
RefSeq Size:	2081
Cytogenetics:	11q22.2
RefSeq ORF:	1407
Synonyms:	CLG; CLGN



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Summary:

This gene encodes a member of the peptidase M10 family of matrix metalloproteinases (MMPs). Proteins in this 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. The encoded preproprotein is proteolytically processed to generate the mature protease. This secreted protease breaks down the interstitial collagens, including types I, II, and III. The gene is part of a cluster of MMP genes on chromosome 11. Mutations in this gene are associated with chronic obstructive pulmonary disease (COPD). Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Jan 2016]

Protein Families:

Druggable Genome, Protease, Secreted Protein

Protein Pathways:

Bladder cancer, Pathways in cancer, PPAR signaling pathway

Product images: