Recombinant Human Matrix Metallopeptidase 2, Hemopexin-like Domain

Cat. No. MMP2-151H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Hemopexin-Like Domain (C domain) of MMP2, from human cDNA, was expressed in*E. coli*. The protein consists of the hemopexin-like domain of human MMP-2. (residues 467-660, swissprot accession P08253). MW = 22.2 kDa.
Species	Human
Source	E.coli
ProteinLength	467-660 a.a.
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 MMP"s are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. This gene encodes an enzyme which degrades type IV collagen, the major structural component of basement membranes. The enzyme plays a role in endometrial menstrual breakdown, regulation of vascularization and the inflammatory response. Mutations in this gene have been associated with Torg-Winchester syndrome.
Purity	> 95% by SDS-PAGE. The protein was observed as a single band migrating at amolecular weight of (>20 kDa).
Supplied As	0.2mg/ml in 20mM Sodium Acetate, pH 5.5, 1mM $CaCl_2$, 250mM NaCl. The

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	concentration is calculated from the absorbance at 280nm (e280 = 51350 M-1 cm-1).
Characteristics	Under the above described conditions, to avoid precipitation or protein dimerization, the product can be concentrated to a maximum of 150μM.
Storage	-20ºC. After initial defrost, aliquot product into individual tubes and refreeze at -20ºC. Avoid repeated freeze/defrost cycles.

GENE INFORMATION

Gene Name	MMP2 matrix metallopeptidase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase) [Homo sapiens]
Synonyms	MMP2; matrix metallopeptidase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase); CLG4; MONA; CLG4A; TBE-1; MMP-II; matrix metalloproteinase 2; collagenase type IV-A; neutrophil gelatinase; matrix metalloproteinase-II; CLG4; 72 kDa type IV collagenase; EC 3.4.24.24; 72 kDa gelatinase; Matrix metalloproteinase-2; MMP-2; Gelatinase A ; MONA; collagenase type IV-A
Gene ID	4313
mRNA Refseq	NM_001127891
Protein Refseq	NP_001121363
MIM	120360
UniProt ID	P08253
Chromosome Location	16q13-q21

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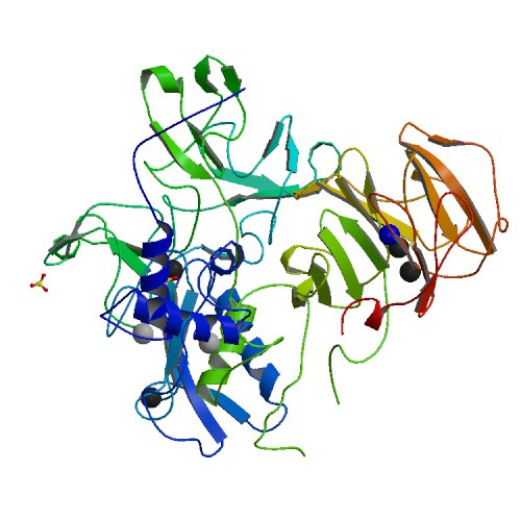
Pathway	Bladder cancer; GnRH signaling pathway; Leukocyte transendothelial migration; Pathways in cancer; Diabetes pathways
Function	calcium ion binding; metalloendopeptidase activity; peptidase activity; protein binding; zinc ion binding
PDB rendering based on 1ck7.	

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