

Recombinant Human MMP14, Hemopexin Domain, His-tagged

Cat. No. MMP14-812H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human MT1-MMP hemopexin domain is produced as a periplasmic protein in E. coli. The protein consists of MT1-MMP amino acid residues G292PNIC . . . CPSGG489 followed by the His-tag VTHHHHHH. The calculated Mr of the recombinant protein is 24 238 Da.
Species	Human
Source	E.coli
Description	Matrix metalloproteinases (MMPs) are Zn ²⁺ - and Ca ²⁺ -dependent endopeptidases which function in the turnover of extracellular matrix components. Presently fifteen secreted MMPs and six membranetype MMPs are known to be expressed in humans. MT1-MMP consists of 559 amino acid residues with a calculated Mr of 63 516 Da. The following domains and sequence regions are distinguished in MT1-MMP: Prodomain (Ser1 - Arg88), catalytic domain (Tyr89 - Gly261), junction between catalytic domain and hemopexin domain (Gly262 - Gly292), hemopexin-like domain (Pro293 - Cys485) and C-terminal sequence (Pro486 - Val559) with transmembrane segment. A soluble form of MT1-MMP without transmembrane segment has been found in culture medium of a breast carcinoma cell line.
Form	The protein is solubilized in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 5 mM CaCl ₂ .
Purity	MT1-MMP hemopexin domain represents more than 95 % of total protein in the preparation.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Applications Isolated MT1-MMP hemopexin domain allows investigate interactions of this domain with low molecular weight ligands and with macromolecules. To detect and monitor recombinant hemopexin domain in such investigations the His-tag can be used. MT1-MMP hemopexin domain can also serve as antigen for generation of antibodies to MT1-MMP.

Storage And Stability MT1-MMP hemopexin domain is stable until the expiry date given on the label if stored at -70°C. The protein can be kept at -20°C for several weeks and in ice for several days. Repeated freezing and thawing should be avoided.

GENE INFORMATION

Gene Name [MMP14 matrix metalloproteinase 14 \(membrane-inserted\) \[Homo sapiens \]](#)

Synonyms MMP14; matrix metalloproteinase 14 (membrane-inserted); MMP-X1; MTMMP1; MT1-MMP; MT1MMP; MT-MMP; matrix metalloproteinase 14; membrane type 1 metalloproteinase; membrane-type matrix metalloproteinase 1; membrane-type-1 matrix metalloproteinase; matrix metalloproteinase 14 (membrane-inserted); MMP-14; EC 3.4.24.80; Membrane-type-1 matrix metalloproteinase; Membrane-type matrix metalloproteinase 1

Gene ID [4323](#)

mRNA Refseq [NM_004995](#)

Protein Refseq [NP_004986](#)

MIM [600754](#)

UniProt ID [P50281](#)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Chromosome Location	14q11-q12
Pathway	GnRH signaling pathway
Function	calcium ion binding; metalloendopeptidase activity; peptidase activator activity; peptidase activity; protein binding; zinc ion binding
	