

Active Recombinant Human MMP14, His-tagged

Cat. No. MMP14-161H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human MMP14 containing 6*his tag at Cterminalwas expressed in mouse myeloma cell, 60 kD (518aa).
Species	Human
Source	Mammalian Cells
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. However, the protein encoded by this gene is a member of the membrane-type MMP (MT-MMP) subfamily; each member of this subfamily contains a potential transmembrane domain suggesting that these proteins are expressed at the cell surface rather than secreted. This protein activates MMP2 protein, and this activity may be involved in tumor invasion.
Nterminal Sequence Analysis	Ala21
Activity	Measured by its ability to cleave a fluorogenic peptide substrate McaKPLGLDpaARNH2. The specific activity is >500 pmol/min/μg.
Endotoxin Level	<1.0 EU per 1

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	µg of the protein by the LAL method.
Purity	>80%, as determined by SDSPAGE.
Formulation	Supplied as a 0.2 µm filtered solution in Sodium Acetate, NaCl, CaCl ₂ , Glycer-ol.
Stability&Storage	Use amannual defrost freezer and avoid repeated freezethaw cycles. 6 months fromdate of receipt, 70 °C as supplied. 3 months, 70 °C under sterileconditions after opening.
OfficialSymbol	MMP14

GENE INFORMATION

Gene Name	MMP14 matrix metalloproteinase 14(membrane-inserted) [Homo sapiens]
Synonyms	MMP14; matrixmetalloproteinase 14 (membrane-inserted); 1; MMP-X1; MT-MMP; MT1MMP; MTMMP1;MT1-MMP; MT-MMP 1; matrix metalloproteinase-14; membrane type 1metalloprotease; membrane-type matrix metalloproteinase 1; membrane-type-1matrix metalloproteinase; MMP-14; EC 3.4.24.80; OTTHUMP00000027917; EC 3.4.24
Gene ID	4323
mRNA Refseq	NM_004995
Protein Refseq	NP_004986
MIM	600754

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UniProt ID	P50281
Chromosome Location	14q11-q12
Pathway	Activation of Matrix Metalloproteinases; Extracellularmatrix organization; GnRH signaling pathway
Function	calcium ion binding; integrin binding; metalloendopeptidaseactivity

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