

Active Recombinant Human MMP14 protein, mutation C127S, No Activation Required

Cat. No. MMP14-33H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Matrix Metalloproteinase-14 (MMP-14, Membrane-Type Matrix Metalloproteinase1, MT1- MMP) cloned from human cDNA, expressed in E. coli. The enzyme consists of the catalytic domain of human MMP-14 (residues 114-290, UniProtKB accession P50281). The protein has the mutation C127S to increase its stability. The catalytic activity rates are not affected by the mutation.
Species	Human
Source	Non
ProteinLength	114-290 aa
Tag	Non
Bio-activity	> 150 U/μg. Activity described as U=100 pmol/min at 25°C using a colorimetric assay with thiopeptide Ac-Pro-Leu-Gly-[2- mercapto-4-methyl-pentanoyl]-Leu-Gly-OC2H5 (B iomol) as substrate.
Molecular Mass	20.1 kDa
AA Sequence	IQGLKWQ HNEITFSIQN YTPKVG EYAT YEAIRKAFRV WESATPLRFR EVPYAYIREG HEKQADIMIF FAEGFHGDST PFDGEGGFLA HAYFPGPNIGGDTHFDSAEP WTVRNE DLNG NDIFLVAVHE LGHALGLEHS SDPSAIMAPF

 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

YQWMDTENFV LPDDDRRGIQ QLYGGESGFP

Purity > 95% by SDS-PAGE

Usage Enzyme kinetic studies, cleavage of target substrates and screening of inhibitors.

Storage -80°C. After initial defrost, aliquot the product into individual tubes and refreeze at -80°C.
Avoid repeated freeze/thaw cycles.

Storage Buffer 0.2 mg/mL solution in Tris 20 mM pH 7.2, CaCl₂ 10 mM, ZnCl₂ 0.1 mM, NaCl 0.3 M, acetohydroxamic acid (AHA) 0.5 M.

GeneID [4323](#)

References
M. Gioia et al. J Mol Biol. 2007 May 11;368(4):1101-13.
K. Lehti et al. J. Biol. Chem. 2000, 275:15006-13.
G. Murphy and V. Knäuper Matrix Biol. 1997, 15, 511.
W. Bode et al. Cell Mol Life Sci 1999, 55:639-52.

GENE INFORMATION

Gene Name [MMP14 matrix metalloproteinase 14 \[Homo sapiens \(human\) \]](#)

Official Symbol [MMP14](#)

Synonyms MMP-14, MMP-X1, MT-MMP, MT1MMP, MTMMP1, WNCHRS, MT1-MMP, MT-MMP 1, MMP14

mRNA Refseq [NM_004995](#)

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Protein Refseq	NP_004986
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MIM	600754
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UniProt ID	P50281
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