Recombinant Human Matrix Metallopeptidase 3 (stromelysin 1, progelatinase)

Cat. No. MMP3-049H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant HumanMMP3 produced in E. coli is a single, non-glycosylated, polypeptide chaincontaining 230 amino acids and having a MW of 22 kDa.
Species	Human
Source	E.coli
Description	MMP3are important regulators of extracellular matrix molecules and cell-cellsignaling and are involved in the regulation of the pericellular space,including the cleavage of matrix proteins. In particular, MMP3 has been shownto be effective in cleaving heparan sulfate proteoglycans. Purifiedrecombinant MMP3 can directly cleave agrin, and it can also remove agrin fromsynaptic basal lamina. MMP3 activity is itself regulated as activation ofMMP3 is lost in denervated muscles.
Form	The protein waslyophilized from a concentrated (1 mg/ml) solution with no additives.
Purity	Greaterthan 98.0% as determined by: Analysis by RP-HPLC, anion-exchange FPLC, andanalysis by reducing and non-reducing SDS-PAGE Silver Stained gel.
Endotoxin Level	Less than0.1 ng/ug (1 EU/ug) of Recombinant MMP3.
Biological Activity	MMP3 is fullybiologically active when compared to standards. The specific activity wa s foundto be =1,250 mU/mg protein. One unit is defined as the amount of enzyme tha thydrolyzes 1 µmol ol of MCA-Arg-Pro-Lys-Pro-Val-Glu-Nva-Trp-Arg-Lys(DNP)-NH2p

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	er min. at 37°C, pH 7.0.
Reconstitution	It isrecommended to reconstitute the lyophilized MICB in sterile 18 MΩ-cm H2O notless than 100 µg/ml, which can then be further diluted to other aqueoussolutions.
storage	Lyophilizedrecombinant Human MMP-3 although stable at room temperature for 3 weeks,should be stored desiccated below -18°C. Uponreconstitution rHu MMP-3 should be stored at 4°C between2-7 days and for future use below -18°C. Pleaseavoid freeze-thaw cycles.
OfficialSymbol	MMP3
Pathways	Matrix Metalloproteinases; Rheumatoidarthritis; p75(NTR)-mediated signaling

GENE INFORMATION

Gene Name	MMP3 matrix metallopeptidase 3(stromelysin 1, progelatinase) [Homo sapiens]
Synonyms	MMP3; matrixmetallopeptidase 3 (stromelysin 1, progelatinase); SL-1; STMY; STR1; CHDS6;MMP-3; STMY1; MGC126102; transin-1; MMP3; MGC126103; matrix metalloproteinase3; CHDS6; Transin-1; proteoglycanase; MGC126104; Matrix metalloproteinase-3;EC 3.4.24.17
Gene ID	4314
mRNA Refseq	NM_002422
Protein Refseq	NP_002413
MIM	185250

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UniProt ID	P08254
Chromosome Location	11q22.3
Function	calcium ion binding;metalloendopeptidase activity; peptidase activity; zinc ion binding
PDB rendering basedon 1b3d.	

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