

## Active Recombinant Human MMP13 protein, His-tagged

Cat. No. MMP13-729H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Active Recombinant Human MMP13 protein(P45452)(103~290 aa), fused with N-terminal His tag, was expressed in E.coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	103-290 aa
<b>Form</b>	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
<b>Bio-activity</b>	<p>Matrix Metalloproteinase 13 (MMP13) is a member of the matrix metalloproteinase (MMP) family. MMP13 has been proposed to participate in aggrecan degradation associated with osteoarthritis and cleavage of type II collagen in osteoarthritic cartilage explants and in tumor progression and metastasis. MMP13 is likely to play a crucial role in the modulation of extracellular matrix degradation and cell-matrix interactions. In addition, it can cleave type I, III, IV, IX, X and XIV collagens and fibronectin. Thus we have chosed casein-zymography to measure the activity of MMP13. Briefly, various concentrations of MMP13 (10g, 5g, 1g, 0.1g, 0.01g) were denatured by SDS loading buffer, electrophoresed through sodium dodecylsulphat-polyacrylamide gel (SDS-PAGE; 15% gels) containing casein (1 mg/mL) with nonreducing conditions. After renaturation, incubation and CCB-stained, active MMP13 would hydrolyze casein nearby, which was indicated by the white bands on</p>

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the gel. In this experiment we use heat-denatured MMP13 protein as negative control, and trypsin (1ug/mL) as positive control.

<b>Molecular Mass</b>	22.3kDa
<b>Endotoxin</b>	<1.0EU per 1µg (determined by the LAL method).
<b>Purity</b>	> 95% as determined by SDS-PAGE.
<b>Storage</b>	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
<b>Reconstitution</b>	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## GENE INFORMATION

<b>Gene Name</b>	MMP13 matrix metalloproteinase 13 (collagenase 3) [ Homo sapiens ]
<b>Official Symbol</b>	MMP13
<b>Synonyms</b>	MMP13; matrix metalloproteinase 13 (collagenase 3); matrix metalloproteinase 13 (collagenase 3); collagenase 3; CLG3; MMP-13; MANDP1;
<b>Gene ID</b>	4322
<b>mRNA Refseq</b>	NM_002427
<b>Protein Refseq</b>	NP_002418
<b>MIM</b>	600108

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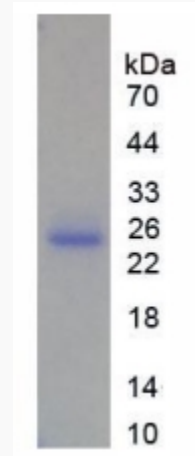
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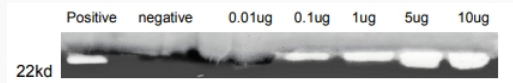
UniProt ID

P45452

SDS-PAGE



Activity



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