

Active Recombinant Human MMP13 protein, His-tagged

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

SPECIFICATION

Product Overview	Active Recombinant Human MMP13 protein(P45452)(103~290 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	103-290 aa
Form	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	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

 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

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

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

GENE INFORMATION

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

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

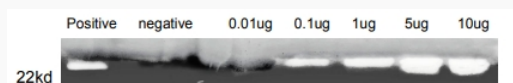
 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

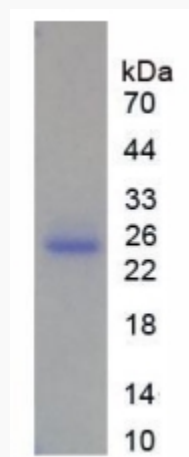
UniProt ID

P45452

Activity



SDS-PAGE



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