

MMP-13, Catalytic Domain, Human Recombinant

CATALOG NO:	P1230-10	10 µg
ALTERNATE NAMES:	Collagenase 3, Matrix metalloproteinase, CLN-3	
SOURCE:	<i>E.coli</i>	
PURITY:	> 95% by SDS-PAGE	
MOL. WEIGHT:	20.5 kDa (104-274 aa) with 6X-His tag at C-terminal	
FORM:	Lyophilized	
FORMULATION:	Proprietary Buffer	
RECONSTITUTION:	Reconstitute the lyophilized protein in 30% glycerol to a final concentration 1.0 mg/ml and incubate the reconstituted protein at 25 °C for 15 minutes.	
STORAGE CONDITIONS:	Lyophilized and reconstituted enzyme can be stored in working aliquots at -20°C. Avoid repeated freeze-thaw cycles.	
DESCRIPTION:	MMP-13 is a member of the matrix metalloproteinase (MMP) family of enzymes. MMP enzymes are associated with remodeling and breaking down matrix proteins. Aberrant expressions of different MMP enzymes have been associated with periodontal disease, arthritis and cancer metastasis. MMP-13 has been associated with breast cancer. This constitutively active MMP-13 lacks the inhibitory pro-domain and hemopexin domain.	
SPECIFIC ACTIVITY:	This enzyme has a specific activity of ≥200 mU/mg based on its ability to hydrolyze a FRET-based MMP-13 quenched substrate and results in increase of fluorescence, which can be detected at Ex/Em = 325/393 nm.	
UNIT DEFINATION:	One unit is the amount of enzyme that will hydrolyze 1.0 umole of MMP-13 substrate per minute at pH 7.5 and 37°C.	

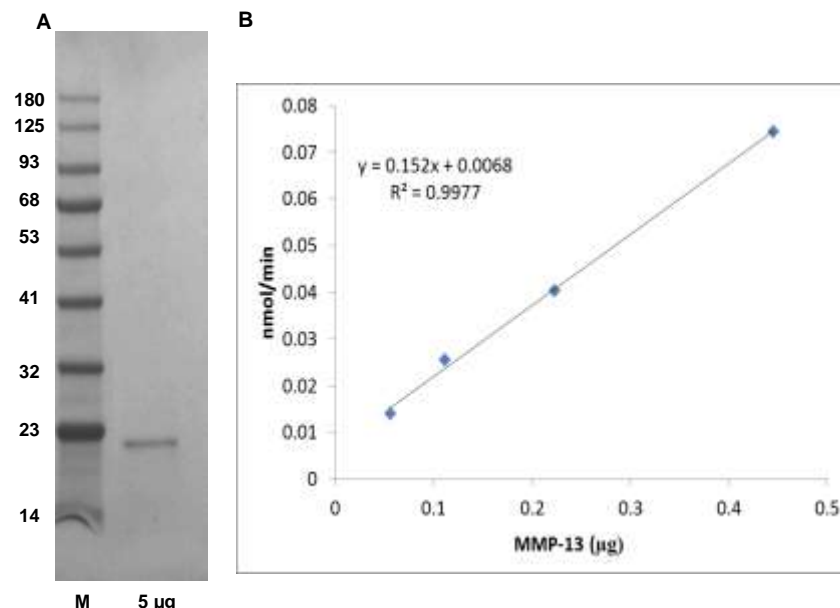


Fig A. SDS-PAGE (4-20%) recombinant MMP-13: Recombinant protein loaded under reducing conditions and stained with Coomassie Blue. The protein shows a predicted MW of ~ 20.5 kDa

Fig B. Enzyme activity assay: The activity of MMP-13 CD is ≥ 200 mU/mg based on its ability to hydrolyze a FRET-based MMP-13 substrate.

RELATED PRODUCTS:

- MMP-9, human recombinant (**Cat. No. 7789**)
- MMP-13 Antibody (**Cat. No. 3533**)
- MMP-13 Inhibitor (**Cat. No. 2392**)
- MMP-9 Inhibitor Screening Kit (Fluorometric) (**Cat. No. K844**)
- MMP-13 Blocking Peptide (**Cat. No. 3533BP**)
- Pro-MMP-13, human recombinant (**Cat. No. 7785**)

FOR RESEARCH USE ONLY! Not to be used on humans.