

Datasheet for ABIN2666511

MMP8 Protein (AA 21-467, C-Term)[Go to Product page](#)

Overview

Quantity:	10 µg
Target:	MMP8
Protein Characteristics:	AA 21-467, C-Term
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Flow Cytometry (FACS)

Product Details

Purity:	> 95 % , as determined by Coomassie stained SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1.0 EU per µg of protein as determined by the LAL method.

Target Details

Target:	MMP8
Alternative Name:	MMP-8 (MMP8 Products)
Background:	MMP-8, also termed neutrophil collagenase, is a member of the matrix metalloproteinase family proteins (MMPs). Members of this family are structurally related, zinc-containing enzymes that degrade the extracellular matrix (ECM) and connective tissue proteins. MMP-8 consists of a prodomain that is cleaved upon activation, a catalytic domain containing the zinc

Target Details

binding site, a hinge region, and a carboxyl terminal domain with hemopexin-like repeats. Substrates of MMP-8 include type I, II, and III triple-helical collagens, gelatin peptides, proteoglycans, fibronectin, aggrecan, substance P, serpins, β -casein, and angiotensin. MMP-8 is released by neutrophils upon IL-1 β IL-8, GM-CSF and TNF- α stimulation. Besides playing a role in phagocytosis, MMP-8 has been implicated in rheumatoid arthritis (RA) because of its high efficiency in infiltrating connective tissue and breaking down ECM. In fact, serum level of MMP-8 is a strong predictor of mortality in RA, as this is consistent with increased activation of neutrophils in RA. In addition, MMP-8 has been shown to play a crucial role in cardiovascular diseases by promoting atherosclerotic lesion formation. This is supported by the finding that MMP-8 knockout mice have less endothelial cells or plaque angiogenesis in the atherosclerotic plaques. In a clinical study, it was shown that the ratio of MMP-9/TIMP-1, as well as MMP-8 serum levels, could be a useful predictor of prognosis in patients with hepatocellular carcinomas.

Molecular Weight:	This 460 amino acid recombinant protein has a predicted molecular mass of approximately 52.6 kDa. The protein migrates at approximately 70 kDa in DTT-reducing conditions and approximately 70 kDa in non-reducing conditions by SDS-PAGE. The predicted N-termi
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Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	Biological activity: Activated human MMP-8 is able to cleave the peptide substrate Mca-KPLGL-Dpa-AR-NH2 with an activity above 375 pmol/min/ μ g.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Reconstitution:	For maximum results, quick spin vial prior to opening.
Buffer:	0.22 μ m filtered protein solution is in TCN (25 mM TRIS, 10 mM CaCl2, 150 mM NaCl, pH 7.5).
Handling Advice:	Avoid repeated freeze/thaw cycles.
Storage:	-20 °C
Storage Comment:	Unopened vial can be stored at -70°C for six months.