Data Sheet (Cat.No.TMPK-01286)

TargetMol

MMP-8 Protein, Cynomolgus, Recombinant (His)

General Information

Synonyms:	Collagenase 2;HNC;CLG1;MMP8;PMNL-CL
Protein Construction:	Phe21-Ser467
Species:	Cynomolgus
Expression Host:	HEK293 Cells
Accession:	XP_005579523.2
Molecular Weight:	52.27 kDa (predicted). Due to glycosylation, the protein migrates to 60-70 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Immobilized Cynomolgus MMP-8, His Tag at 2μg/ml (100μl/well) on the plate. Dose response curve for Anti-MMP-8 Antibody, hFc Tag with the EC50 of 38.2ng/ml determined by ELISA (QC tested).
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1 EU/μg by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

Alteration of matrix metalloproteinases (MMPs) and tissue inhibitors of metalloproteinases (TIMPs) expression has been studied for various cardiac diseases, including dilated cardiomyopathy (DCM), with the significance of surrogate markers of extracellular matrix (ECM) remodeling. MMP-8 was identified only in myocardiocytes, while MMP-9 and TIMP-2 were present in both myocardiocytes and stroma, but with different intensity. The increasing

intensity of MMP-8 and TIMP-2 immunoreactions was significantly associated with low HCS.

Reference

Mitruţ R, et al. Immunoexpression of MMP-8, MMP-9 and TIMP-2 in dilated cardiomyopathy. Rom J Morphol Embryol. 2019;60(1):119-124. PMID: 31263835.