Recombinant Human MMP1 Protein (His Tag)

Catalog Number: PKSH032740



Note: Centrifuge before opening to ensure complete recovery of vial contents.

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 Species
 Human

 Mol_Mass
 52.9 kDa

 Accession
 P03956

Bio-activity Not validated for activity

Properties

Purity > 95 % as determined by reducing SDS-PAGE.

Endotoxin $< 1.0 \text{ EU per } \mu\text{g}$ of the protein as determined by the LAL method.

Storage Storage Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel

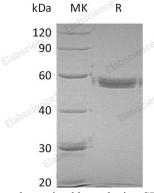
packs. Upon receipt, store it immediately at < - 20°C.

Formulation Supplied as a 0.2 μm filtered solution of 20mM MES, 150mM NaCl, 2mM CaCl₂,

1mM DTT, 0.05%Brij35, 10% Glycerol, pH 5.0.

Reconstitution Not Applicable

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Matrix Metalloproteinase-1 (MMP-1) is expressed by fibroblasts, keratinocytes, endothelial cells, monocytes and macrophages. MMP1 contains several distinct domains: a prodomain that is cleaved upon activation, a catalytic domain containing the zinc binding site, a short hinge region, and a carboxyl terminal (hemopexin like) domain. MMP-1 can degrade a broad range of substrates including types I, II, III, VII, VIII, and X collagens as well as casein, gelatin, α1 antitrypsin, myelin basic protein, L-Selectin, pro-TNF, IL1, IGFBP3, IGFBP5, pro-MMP2, and pro-MMP9. A significant role of MMP1 is the degradation of fibrillar collagens in extracellular matrix remodeling, characterized by the cleavage of the interstitial collagen triple helix into 3/4, 1/4 fragments. MMP1 may also be involved in enzyme cascades, cytokine regulation and cell surface molecule modulation.

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