Recombinant Human MMP-1 (C-6His)

Catalog No: C374

Description	Recombinant Human Matrix Metalloproteinase-1 is produced by our Mammalian expression system and the target gene encoding Phe20-Asn469 is expressed with a 6His tag at the C-terminus.
Source	Human Cells
Alternative name	Interstitial Collagenase; Fibroblast Collagenase; Matrix Metalloproteinase-1; MMP-1; MMP1; CLG
Accession No.	P03956
Predicted Molecular Weight	52.88kDa
AP Molecular Weight	56kDa, reducing conditions.
Formulation	Note: The proenzyme needs to be activated by APMA. Supplied as a 0.2 μm filtered solution of 20mM MES, 150mM NaCl, 0.05% Brij35, 10% Glycerol, pH 5.5.
Quality Control	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.
Shipping	The product is shipped on dry ice/polar packs. Upon receipt, store it immediately at the temperature listed below.
Storage	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
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, α 1 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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