PRODUCT INFORMATION

Expression system Baculovirus

Domain 18-469aa

UniProt No. P03956

NCBI Accession No. NP_002412

Alternative Names Interstitial collagenase isoform 1, MMP1, CLG, CLGN

PRODUCT SPECIFICATION

Molecular Weight 53.1 kDa (460aa)

Concentration 0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. 20mM MES buffer (pH 5.5) containing 10mM CaCl2, 100mM NaCl, 0.05% Brij35, 30% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

MMP1, also known as interstitial collagenase isoform 1, contains 4 hemopexin-like domains and is a member of the matrix metalloproteinase (MMP) family. It is capable of degrading a wide range of extracellular molecules and a number of bioactive molecules. It plays a central role in cell proliferation, migration, differentiation, angiogenesis, apoptosis and host defences. Recombinant human MMP1, fused to His-tag at C-terminus, was



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expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

HSFPATLETQ EQDVDLVQKY LEKYYNLKND GRQVEKRRNS GPVVEKLKQM QEFFGLKVTG KPDAETLKVM KQPRCGVPDV AQFVLTEGNP RWEQTHLTYR IENYTPDLPR ADVDHAIEKA FQLWSNVTPL TFTKVSEGQA DIMISFVRGD HRDNSPFDGP GGNLAHAFQP GPGIGGDAHF DEDERWTNNF REYNLHRVAA HELGHSLGLS HSTDIGALMY PSYTFSGDVQ LAQDDIDGIQ AIYGRSQNPV QPIGPQTPKA CDSKLTFDAI TTIRGEVMFF KDRFYMRTNP FYPEVELNFI SVFWPQLPNG LEAAYEFADR DEVRFFKGNK YWAVQGQNVL HGYPKDIYSS FGFPRTVKHI DAALSEENTG KTYFFVANKY WRYDEYKRSM DPGYPKMIAH DFPGIGHKVD AVFMKDGFFY FFHGTRQYKF DPKTKRILTL QKANSWFNCR KNLEHHHHHH

General References

Kumar JD., et al. (2015) Am J Physiol Gastrointest Liver Physiol. 309:G78-G86. Yang H., et al. (2015) Biochemistry. 54:3631-3639.

DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)

