PRODUCT INFORMATION

Expression system E.coli

Domain 100-477aa

UniProt No. P08254

NCBI Accession No. NP_002413

Alternative Names Matrix metallopeptidase 3, CHDS6, MMP-3, SL-1, STMY, STMY1, STR1

PRODUCT SPECIFICATION

Molecular Weight 45.2 kDa (401aa) confirmed by MALDI-TOF

Concentration 0.25mg/ml (determined by Bradford assay)

Formulation Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol

Purity > 90% by SDS-PAGE

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

Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. MMP3 is an enzyme which degrades fibronectin, laminin, collagens III, IV, IX, and X, and cartilage proteoglycans. The enzyme is thought to be involved in wound repair, progression of atherosclerosis, and tumor initiation. Recombinant human MMP3 protein, fused to His-tag



at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSFRTFPGI PKWRKTHLTY RIVNYTPDLP KDAVDSAVEK ALKVWEEVTP LTFSRLYEGE ADIMISFAVR EHGDFYPFDG PGNVLAHAYA PGPGINGDAH FDDDEQWTKD TTGTNLFLVA AHEIGHSLGL FHSANTEALM YPLYHSLTDL TRFRLSQDDI NGIQSLYGPP PDSPETPLVP TEPVPPEPGT PANCDPALSF DAVSTLRGEI LIFKDRHFWR KSLRKLEPEL HLISSFWPSL PSGVDAAYEV TSKDLVFIFK GNQFWAIRGN EVRAGYPRGI HTLGFPPTVR KIDAAISDKE KNKTYFFVED KYWRFDEKRN SMEPGFPKQI AEDFPGIDSK IDAVFEEFGF FYFFTGSSQL EFDPNAKKVT HTLKSNSWLN C

coomassie blue stain.

3ug by SDS-PAGE under reducing condition and visualized by

General References

Nagase H., et al. (1990) Biochemistry. 29:5783-5789 Ye S., et al. (1996) J. Biol. Chem. 271:13055-13060

DATA



15% SDS-PAGE (3ug)