PRODUCT INFORMATION

Expression system E.coli

Domain 24-207aa

UniProt No. P01033

NCBI Accession No. NP_003245

Alternative Names Metalloproteinase inhibitor 1, EPA, EPO, HCI, CLGI, TIMP

PRODUCT SPECIFICATION

Molecular Weight 23 kDa (205aa)

Concentration 0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE,Denatured

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

TIMP1 also known as metalloproteinase inhibitor 1. The matrix metalloproteinases are inhibited by specific endogenous tissue inhibitors of metalloproteinases (TIMPs), which comprise a family of four protease inhibitors: TIMP1, TIMP2, TIMP3 and TIMP4. Overall, all MMPs are inhibited by TIMPs once they are activated but the gelatinases (MMP-2 and MMP-9) can form complexes with TIMPs when the enzymes are in the latent form. The complex of latent MMP-2 (pro-MMP-2) with TIMP-2 serves to facilitate the activation of pro-MMP-2 at the cell surface by MT1-MMP (MMP-14), a membrane-anchored MMP. The role of the pro-MMP-9/TIMP-1 complex is still



unknown. Recombinant human TIMP1, fused to His-tag at N-terminus, was expressed in E. coli.

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MCTCVPPHPQ TAFCNSDLVI RAKFVGTPEV NQTTLYQRYE IKMTKMYKGF QALGDAADIR FVYTPAMESV CGYFHRSHNR SEEFLIAGKL QDGLLHITTC SFVAPWNSLS LAQRRGFTKT YTVGCEECTV FPCLSIPCKL QSGTHCLWTD QLLQGSEKGF QSRHLACLPR EPGLCTWQSL RSQIA

coomassie blue stain.

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

General References

Brew K., et al. (2000) Biochim Biophys Acta 1477 (1-2): 267-83.

DATA



15% SDS-PAGE (3ug)