

Recombinant Human TIMP1

Cat. No. TIMP1-30303TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length Human TIMP1; amino acids 24-207, 20.6kDa.
Species	Human
Source	E.coli
ProteinLength	24-207 a.a.
Description	This gene belongs to the TIMP gene family. The proteins encoded by this gene family are natural inhibitors of the matrix metalloproteinases (MMPs), a group of peptidases involved in degradation of the extracellular matrix. In addition to its inhibitory role against most of the known MMPs, the encoded protein is able to promote cell proliferation in a wide range of cell types, and may also have an anti-apoptotic function. Transcription of this gene is highly inducible in response to many cytokines and hormones. In addition, the expression from some but not all inactive X chromosomes suggests that this gene inactivation is polymorphic in human females. This gene is located within intron 6 of the synapsin I gene and is transcribed in the opposite direction.
Biological activity	Biological Activity :TIMP1 activity was measured by its ability to inhibit human MMP1 induced hydrolysis of a chromogenic peptide substrate at room temperature. Half maximal inhibition was obtained at a TIMP1 concentration of approximately 0.5 µg/ml, whe
Form	Lyophilised:Centrifuge the vial prior to opening. Reconstitute in water to a

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concentration of 0.1-1.0 mg/ml. Do not vortex (can be stored at 4C for up to 1 week). For extended storage, it is recommended to further dilute in a buffer containing a carrier pr

Purity >95% by SDS-PAGE

Storage The lyophilized protein is stable at room temperature for up to 1 month. Working aliquots stored with a carrier protein are stable for at least 3 months at -20°C to -80°C. Avoid repeated freeze/thaw cycles. See reconstitution notes

Sequences of amino acids
 CTCVPPHPQT AFCNSDLVIR AKFVGTPPEVN QTTLYQRYEI KMTKMYKGFQ
 ALGDAADIRF VYTPAMESVC GYFHRSHNRS EEFLIAGKLQ DGLLHITTCS
 FVAPWNSLSL AQRRGFTKTY TVGCEECTVF PCLSIPCKLQ SGTHCLWTDQ
 LLQGSEKGFQ SRHLACLPRE PGLCTWQSLR SQIA

Sequence Similarities Belongs to the protease inhibitor I35 (TIMP) family. Contains 1 NTR domain.

Full Length Full L.

GENE INFORMATION

Gene Name TIMP1 TIMP metalloproteinase inhibitor 1 [Homo sapiens]

Official Symbol TIMP1

Synonyms TIMP1; TIMP metalloproteinase inhibitor 1; CLGI, TIMP, tissue inhibitor of metalloproteinase 1 (erythroid potentiating activity, collagenase inhibitor); metalloproteinase inhibitor 1; EPO;

Gene ID 7076

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mRNA Refseq	NM_003254
Protein Refseq	NP_003245
MIM	305370
Uniprot ID	P01033
Chromosome Location	Xp11.3-p11.23
Pathway	Hemostasis, organism-specific biosystem; IL6-mediated signaling events, organism-specific biosystem; Matrix Metalloproteinases, organism-specific biosystem; Platelet activation, signaling and aggregation, organism-specific biosystem; Platelet degranulation, organism-specific biosystem;
Function	enzyme inhibitor activity; metal ion binding; metalloendopeptidase inhibitor activity; metalloendopeptidase inhibitor activity; protein binding;

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