

# Human CellExp™ TIMP1, human recombinant

<b>CATALOG #:</b>	7440-10	10 µg
<b>ALTERNATE NAMES:</b>	TIMP1, TIMP-1, CLGI, EPA, EPO, FLJ90373, HCl, TIMP, TIMP metalloproteinase inhibitor 1	
<b>SOURCE:</b>	HEK 293 cells (Cys 24 – Ala 207)	
<b>PURITY:</b>	≥ 95% by SDS-PAGE gel	
<b>MOL. WEIGHT:</b>	This protein contains C-terminal polyhistidine tag and has a calculated MW of 24 kDa. DTT-reduced protein migrates as 28-32 kDa polypeptide in SDS-PAGE.	
<b>ENDOTOXIN LEVEL:</b>	<1 EU/µg by LAL method	
<b>FORM:</b>	Lyophilized	

**FORMULATION:** Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

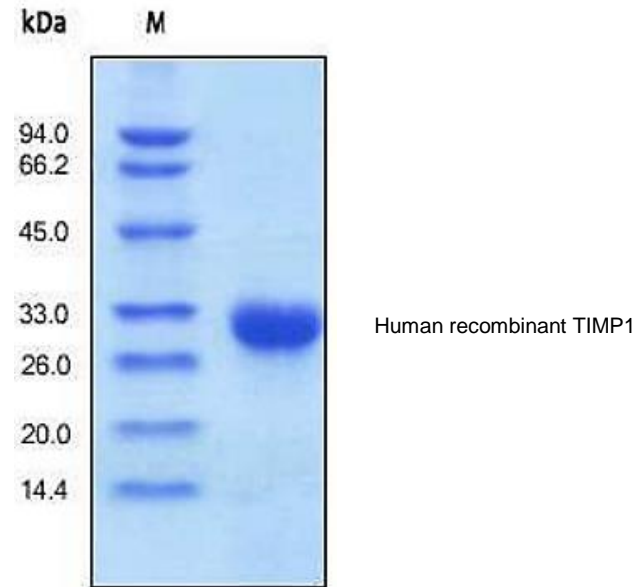
**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

**DESCRIPTION:** TIMP metalloproteinase inhibitor 1, also known as TIMP1, a tissue inhibitor of metalloproteinases, is a glycoprotein that is expressed from the several tissues of organisms. This protein a member of the TIMP family. There are four members of the family, TIMP1, TIMP2, TIMP3 and TIMP4. TIMP1 is a glycoprotein with a molecular mass of 28 kDa produced by a wide range of cell types. The glycoprotein is a natural inhibitor 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:** Measured by its ability to inhibit human MMP2 cleavage of a fluorogenic peptide substrate Mca-PLGL-Dpa-AR-NH2. The IC<sub>50</sub> value is approximately 2.5 nM.



**RELATED PRODUCTS:**

- TIMP-1, human recombinant (Cat. No. 7786-5)
- TIMP-1, human neutrophil granulocytes (Cat. No. 7787-5)
- TIMP-2, human fibroblasts (Cat. No. 7788-5)
- TIMP-1 (Mouse) ELISA Kit (Cat. No. K4750-100)
- TIMP-1 (Mouse) ELISA Kit (For Lysates) (Cat. No. K4751-100)
- TIMP-2 (Mouse) ELISA Kit (Cat. No. K4752-100)

**FOR RESEARCH USE ONLY! Not to be used in humans.**

