

32-6924: TIMP1 Rat

Alternative Name : Metalloproteinase inhibitor 1, Tissue inhibitor of metalloproteinases 1, TIMP-1, TIMP1.

Description

Source: Sf9, Baculovirus cells.

Sterile filtered colorless solution.

TIMP1 is a member of the TIMP family. TIMP1 is an inducible glycoprotein produced by various cell types. The TIMP1 glycoprotein is a natural inhibitor of the matrix metalloproteinases, which a group of peptidases involved in degradation of the extracellular matrix. TIMP1 binds in a reversible mode to MMPs, with regions in the N-terminal domain binding to the MMP substrate-binding site. On top of its inhibitory function against most of the known MMPs, TIMP1 is able to promote cell proliferation in a broad range of cell types, and may also have an anti-apoptotic role. Furthermore, TIMP1 has erythroid-potentiating activity via translocation to the nucleus and also inhibits apoptosis in B-cells. The TIMP1 gene is situated within intron 6 of the synapsin I gene and is transcribed in the opposite direction. TIMP1 activity is dependent on the existence of disulfide bonds. TIMP1 transcription is extremely inducible in reaction to many cytokines and hormones. Increased TIMP1 levels are connected with squamous cell laryngeal carcinoma. TIMP1 overexpression is linked to gastric cancer.

TIMP1 produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain (24-217 a.a.) and fused to a 6 aa His Tag at C-terminus containing a total of 200 amino acids and having a molecular mass of 22.3kDa. TIMP1 Ligand shows multiple bands between 18-28kDa on SDS-PAGE, reducing conditions and purified by proprietary chromatographic techniques.

Product Info

Amount :	2 µg / 10 µg
Purification :	Greater than 90.0% as determined by SDS-PAGE.
Content :	TIMP1 Ligand protein solution (0.5mg/ml) contains Phosphate buffered saline (pH7.4) and 10% glycerol.
Storage condition :	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
Amino Acid :	CSCAPTHPQT AFCNSDLVIR AKFMGSPEII ETTLYQRYEI KMTKMLKGFD AVGNATGFRF AYTPAMESLC GYVHKSQNRS EEFLIAGRLR NGNLHITACS FLVPWHNLSP AQQKAFVKTY SAGCGVCTVF PCSAIPCKLE SDSHCLWTDQ ILMGSEKGYQ SDHFACLPRN PDLCTWQYLG VSMTRSLPLA KAEAHHHHHH Å