**NKMAXBio** We support you, we believe in your research **Recombinant rat TIMP-1 protein** Catalog Number: ATGP3178

# **PRODUCT INFORMATION**

**Expression system** Baculovirus

**Domain** 24-217aa

**UniProt No.** P30120

NCBI Accession No. NP\_446271

Alternative Names Timp1, Timp, TIMP-1

# **PRODUCT SPECIFICATION**

Molecular Weight 22.3 kDa (200aa)

**Concentration** 0.5mg/ml (determined by absorbance at 280nm)

## Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS-PAGE

**Endotoxin level** < 1 EU per 1ug of protein (determined by LAL method)

**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

TIMP1, also known as metalloproteinase inhibitor 1, a tissue inhibitor of metalloproteinases, is a glycoprotein that is expressed from the several tissues of organisms. 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. MMP1 functions as a growth factor that regulates cell differentiation, migration and cell death and activates cellular signaling cascades via CD63 and ITGB1. It plays a role in integrin signaling. Recombinant rat TIMP1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

#### Amino acid Sequence

CSCAPTHPQT AFCNSDLVIR AKFMGSPEII ETTLYQRYEI KMTKMLKGFD AVGNATGFRF AYTPAMESLC GYVHKSQNRS EEFLIAGRLR NGNLHITACS FLVPWHNLSP AQQKAFVKTY SAGCGVCTVF PCSAIPCKLE SDSHCLWTDQ ILMGSEKGYQ SDHFACLPRN PDLCTWQYLG VSMTRSLPLA KAEA<HHHHHH>

#### **General References**

Uchida C et al., (2014) Biochem. Cell Biol. 92(1):77-83. Zhang CY et al., (2013) Acta Pharmacol. Sin. 34(10):1301-1309.

## DATA

#### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.