

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

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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

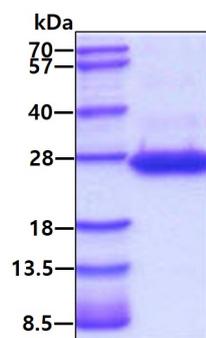
CSCAPTHPQT AFCNSDLVIR AKFMGSPEII ETTLYQRYEI KMTKMLKGF D AVGNATGFRF AYTPAMESLC GYVHKSQNRSEEF
LIAGRLR NGNLHITACS FLVPWHNLSP AQQKAFVKTY SAGCGVCTVF PCSAIPCKLE SDSHCLWTDQ ILMGSEKGYQSDH
FACLPRN PDLCTWQYLG VSMTRSLPLA KAEA<HHHHHH>

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.