

# Product datasheet

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ARG81284 Rat TIMP-1 ELISA Kit Package: 96 wells Store at: 4°C

#### Summary

Product Description ARG81284 Rat TIMP-1 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Rat TIMP-1 in

serum, plasma or cell culture supernatants.

Tested Reactivity Rat

Tested Application ELISA

Target Name TIMP1

Conjugation HRP

Conjugation Note Substrate: TMB and read at 450 nm.

Sensitivity 15 pg/ml

Sample Type Serum, plasma or cell culture supernatants.

Standard Range 31.2 - 2000 pg/ml

Sample Volume  $100 \ \mu l$ 

Alternate Names Erythroid-potentiating activity; TIMP; Collagenase inhibitor; Fibroblast collagenase inhibitor; TIMP-1;

EPO; CLGI; Tissue inhibitor of metalloproteinases 1; HCI; Metalloproteinase inhibitor 1; EPA

## **Application Instructions**

Assay Time ~ 3.5 hours

## **Properties**

Form 96 well

Storage instruction Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test

reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual

for detail temperatures of the components.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol Timp1

Gene Full Name TIMP metallopeptidase inhibitor 1

Background 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. [provided by RefSeq, Jul 2008]

Function Metalloproteinase inhibitor that functions by forming one to one complexes with target

metalloproteinases, such as collagenases, and irreversibly inactivates them by binding to their catalytic zinc cofactor. Acts on MMP1, MMP2, MMP3, MMP7, MMP8, MMP9, MMP10, MMP11, MMP12, MMP13 and MMP16. Does not act on MMP14. Also functions as a growth factor that regulates cell differentiation, migration and cell death and activates cellular signaling cascades via CD63 and ITGB1. Plays a role in integrin signaling. Mediates erythropoiesis in vitro; but, unlike IL3, it is species-specific, stimulating the growth and differentiation of only human and murine erythroid progenitors. [UniProt]

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TIMP1 antibodies; TIMP1 ELISA Kits;

Related news:

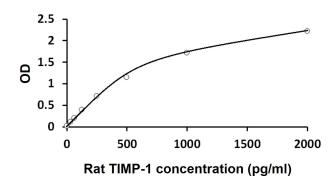
**Detecting MMPs and their non-ECM substrates** 

New ELISA data calculation tool: Simplify the ELISA analysis by GainData

PTM The activity of TIMP1 is dependent on the presence of disulfide bonds.

N-glycosylated.

#### **Images**



#### ARG81284 Rat TIMP-1 ELISA Kit standard curve image

ARG81284 Rat TIMP-1 ELISA Kit results of a typical standard run with optical density reading at 450 nm.