

## CERTIFICATE OF ANALYSIS - TECHNICAL DATA SHEET

Product name TIMP-1, Human, pAb

Catalog number HP9075

Lot number - Expiry date -

Volume 100 μl Amount 100 μg

Formulation 0.2 μm filtered in Concentration 1,0. mg/ml

PBS+0.02%NaN3+0.5%BSA+50%glycerol

Host Species Rabbit IgG Conjugate None

Endotoxin N.A. Purification Affinity purified

Storage -20°C

## **Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes						•		•
No								
N.D.	•	•	•	•	•		•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

## **General Information**

## Description

Tissue inhibitors of metallproteinases (TIMPs) control metallo proteinases (MMPs), which are a large class of catalytic enzymes involved in a wide range of processes regulating tissue homeostasis. MMPs are formed as inactive zymogens which must be cleaved to become active. Activated MMPs are inhibited by four TIMPs. TIMPs form non-covalent complexes with MMPs. MMPs function through a divalent metal ion in their catalytic domain. TIMPS bind to this catalytic domain in a 1:1 ratio. TIMP and MMP expression and function are tightly regulated in order to contain a balance in proteolysis and proteolysis inhibition. Each TIMP targets multiple enzymes. TIMPs are ca 21Kda and share approximately 40% in amino acid sequence. The inhibitory capacity is located within the N-terminal domain. TIMP1 and TIMP3 are inducible, cell cycle regulated, glycosylated proteins expressed in many organs. TIMP2 is ubiquitous and constitutively expressed, whereas TIMP3 is tissue restricted. As extracellular proteins, the secretion, endocytosis and binding partners of TIMPs influence their localization. All TIMPs are secreted, but only TIMP3 is incorporated into the matrix. TIMP1 is considered more and more as potential prognostic biomarker several forms of cancers. Transcription of the gene is induced by inflammatory cytokines like IL-1&6 and TNFα. The balance between TIMPs and MMPs regulates signal transduction which are central to immune cell activity.

Cross reactivity Mouse: Yes; Rat: Yes

Immunogen Synthetic peptide, human TIMP-1

Gene Gene name: TIMP1 Entrez Gene ID 7076 Uniprot P01033

**Storage&stability** Product should be stored at -20°C. Under recommended storage conditions, product is stable for at least one year.

**Precautions**For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent

infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC Date
Robbert Zwinkels 21/06/2019

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.

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