

## RayBiotech, Inc.

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### Certificate of Analysis and Data Sheet

#### Rabbit Anti-Human Tissue Inhibitor of Metalloproteinases-1, C-terminus Antibody

<b>Catalog No:</b> 130-00016	<b>Isotype:</b> Rabbit IgG	<b>Species:</b> Human	<b>Accession No:</b> P01033
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#### Description

**Tissue Inhibitor of Metalloproteinases-1**, also known as **TIMP1**, a tissue inhibitor of metalloproteinases, is a glycoprotein that is expressed from the several tissues of organisms. This protein is a member of the TIMP family. 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. 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.

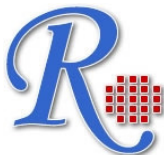
#### Applications

##### Summary of antibody applications and working conditions

<b>Options</b> <b>Functions</b>	<b>YES</b>	<b>NO</b>	<b>Not determined</b>	<b>Recommended Work dilution or concentration</b>
ELISA	*			1 : 64,000
Western Blotting	*			1 : 1,000
Enzyme Immunoassay(EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	
Neutralization			*	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application

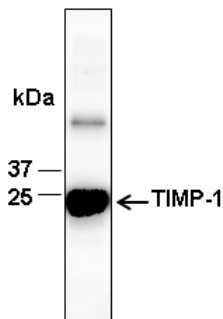
**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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Western blot analysis of recombinant human TIMP-1, using anti-TIMP-1 antibody (1 : 1,000)

### ***Preparation***

The immunogen was a synthetic peptide (TIMP1). This antibody was produced from a rabbit immunized with this peptide conjugated with KLH. The IgG fraction was purified from rabbit serum by Protein G affinity chromatography.

### ***Specificity***

This antibody can specifically bind to human TIMP-1. The cross reactivity with mouse and rat TIMP-1 was not tested.

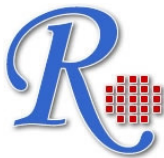
### ***Reconstitution***

Product is supplied as a powder obtained from lyophilization of purified antibody in PBS without preservatives. Reconstitute the antibody with sterile 1 x PBS to a final concentration of 1 mg/ml.

### ***Storage***

Store at 4°C if intended for use within one month, otherwise, store at -20°C to -80°C. The lyophilized antibody is stable for at least 18 months after the date of receipt when stored at -20°C to -80°C. After reconstitution, it can also be aliquoted and stored frozen at -20°C to -80°C in a manual defrost freezer for at least 6 months without detectable loss of activity. Upon reconstitution, the antibody can also be stored for 30 days at 4°C. **Please avoid freeze-thaw cycles, as this will lower the activity of the antibody.**

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### **Reference**

1. Hornebeck W (2004). "Down-regulation of tissue inhibitor of matrix metalloprotease-1 (TIMP-1) in aged human skin contributes to matrix degradation and impaired cell growth and survival.". *Pathol. Biol.* **51** (10): 569–73.
2. Gardner J, Ghorpade A (2004). "Tissue inhibitor of metalloproteinase (TIMP)-1: the TIMPed balance of matrix metalloproteinases in the central nervous system.". *J. Neurosci. Res.* **74** (6): 801–6.

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