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Datasheet for 600-401-P97

TIMP1 Antibody

Overview

Description:	Anti-TIMP1 (RABBIT) Antibody - 600-401-P97
Item No.:	600-401-P97
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	TIMP metallopeptidase inhibitor 1, also known as TIMP1, a tissue inhibitor of metalloproteinases, is a glycoprotein that is expressed from the several tissues of organisms. This protein 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. TIMP was found to be located about 22 cM proximal to OTC (300461). This antibody is suitable for researchers interested in extracellular matrix antibodies and cancer research.
Synonyms:	Erythroid-potentiating activity
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TIMP1
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	TIMP1 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a sequence at the C-terminal of human TIMP1.
Purity/Specificity:	Anti-TIMP1 antibody is directed against human TIMP1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human based on 100% homology for the immunogen sequence. Cross reactivity with TIMP1 from other sources has not been determined.
Relevant Links:	• UniProtKB - P01033 • GeneID - 7076 • NCBI - NP_003245.1

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-TIMP1 is tested for Immunohistochemistry-P and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~23.2kDa corresponding to the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:100-1:500
WB:	0.5µg/mL

Formulation

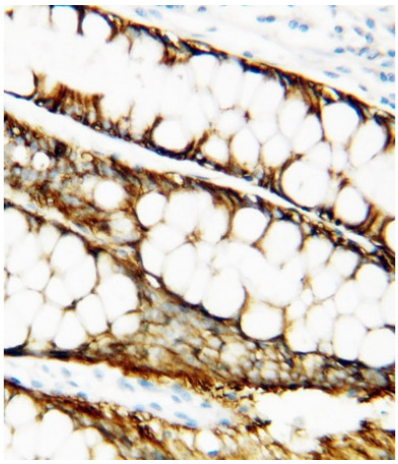
Physical State:	Lyophilized
Concentration:	0.5 mg/mL by UV absorbance at 280 nm
Buffer:	0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3
Preservative:	0.05mg Thimerosal
Stabilizer:	5mg BSA
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

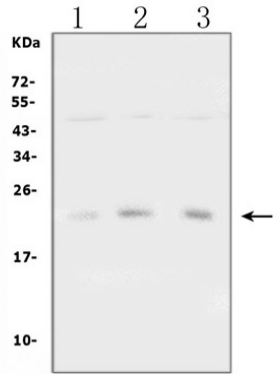
Shipping Condition:	Ambient

Storage Condition:	Store vial at 4° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

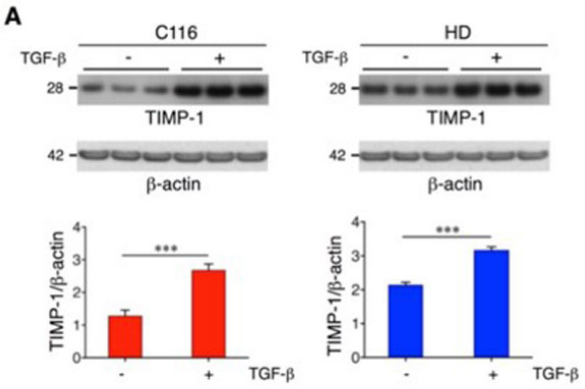


Immunohistochemistry
Immunohistochemistry of Anti-TIMP-1 antibody.
Tissue: Human Mammary Cancer Tissue. IHC(P).



Western Blot

Western blot analysis of TIMP1 using anti-TIMP1 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human U-87MG whole cell lysates, Lane 2: human U2OS whole cell lysates, Lane 3: human PC-3 whole cell lysates.
After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT.
The membrane was incubated with affinity purified rabbit anti-TIMP1 antigen polyclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for TIMP1 at approximately 23KD. The expected band size for TIMP1 is at 23KD.



Western Blot

Western blot analysis of TIMP1 using anti-TIMP1 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30µg of sample under reducing conditions.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% milk in TBST for 1.5 hour at RT. The membrane was incubated with rabbit anti-Metalloproteinase inhibitor 1 TIMP1 antibody at 1:250 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:2000 for 2 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for metalloproteinase inhibitor 1 TIMP1 at approximately 28 kDa. The expected band size for metalloproteinase inhibitor 1 TIMP1 is at 23 kDa.

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Disclaimer

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