

Rabbit anti-Mouse, Rat TIMP1 Polyclonal Antibody | anti-Timp1 antibody

Anti-TIMP1 Antibody

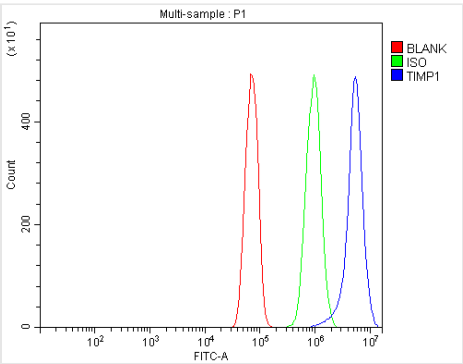
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125559	Rabbit	Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

TIMP1; Polyclonal Antibody; Anti-TIMP1 Antibody; Timp1; Timp; Timp-1; Metalloproteinase inhibitor 1; Collagenase inhibitor 16C8 fibroblast; Erythroid-potentiating activity; EPA; TPA-S1; TPA-induced protein; Tissue inhibitor of metalloproteinases 1; TIMP-1; tissue inhibitor of metalloproteinase 1; anti-Timp1 antibody

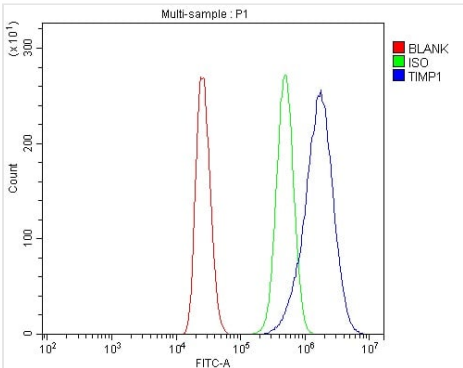
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for TIMP1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-Timp1 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E Coli-derived mouse TIMP1 recombinant protein (Position: H31-N193).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



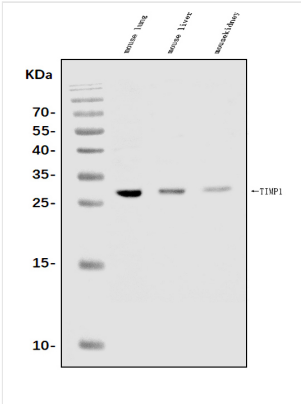
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of RH35 cells using anti-TIMP1 antibody (AAA125559).Overlay histogram showing RH35 cells stained with AAA125559 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TIMP1 Antibody (AAA125559, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of RAW264. 7 cells using anti-TIMP1 antibody (AAA125559).Overlay histogram showing RAW264. 7 cells stained with AAA125559 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TIMP1 Antibody (AAA125559, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of TIMP1 using anti-TIMP1 antibody (AAA125559).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 30ug of sample under reducing conditions.Lane 1: mouse lung tissue lysatesLane 2: mouse liver tissue lysatesLane 3: mouse kidney tissue 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 rabbit anti-TIMP1 antigen affinity purified polyclonal antibody (Catalog # AAA125559) at 0. 5 μg/mL overnight at 4 degree 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 1:5000 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 28KD. The expected band size for TIMP1 is at 28KD.

ADDITIONAL INFORMATION

Related Product Information for anti-Timp1 antibody

TIMP metalloproteinase 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 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. TIMP was found to be located about 22 cM proximal to OTC (300461).

References	1. Anderson, C. L., Brown, C. J. Polymorphic X-chromosome inactivation of the human TIMP1 gene. Am. J. Hum. Genet. 65: 699-708, 1999. 2. Zeiss, C. J., Acland, G. M., Aguirre, G. D., Ray, K. TIMP-1 expression is increased in X-linked progressive retinal atrophy despite its exclusion as a candidate gene. Gene 225: 67-75, 1998.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	113205063
NCBI GeneID	21857
NCBI Accession #	NP_001037849.1
NCBI GenBank Nucleotide #	NM_001044384.1
UniProt Accession #	P12032; P20064; Q61720
Molecular Weight	22,628 Da
NCBI Official Full Name	metalloproteinase inhibitor 1 isoform a
NCBI Official Synonym Full Names	tissue inhibitor of metalloproteinase 1
NCBI Official Symbol	Timp1
NCBI Official Synonym Symbols	EPA; Clgi; Timp; TIMP-1; TPA-S1
NCBI Protein Information	metalloproteinase inhibitor 1
UniProt Protein Name	Metalloproteinase inhibitor 1
UniProt Gene Name	Timp1
UniProt Synonym Gene Names	Timp; Timp-1; EPA; TIMP-1
UniProt Entry Name	TIMP1_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.