

## TIMP2 Antibody

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8492b

## Specification

## TIMP2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC-P, FC, IF,E <u>P16035</u> Human Mouse monoclonal IgG1,κ 24399

## TIMP2 Antibody - Additional Information

Gene ID 7077

**Other Names** Metalloproteinase inhibitor 2, CSC-21K, Tissue inhibitor of metalloproteinases 2, TIMP-2, TIMP2

Target/Specificity

This TIMP2 antibody is generated from a mouse immunized with arecombinant protein of human TIMP2.

Dilution WB~~1:500 IHC-P~~1:25 FC~~1:25 IF~~1:25 E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** TIMP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### TIMP2 Antibody - Protein Information

Name TIMP2

Function Complexes with metalloproteinases (such as collagenases) and irreversibly inactivates



them by binding to their catalytic zinc cofactor. Known to act on MMP-1, MMP-2, MMP-3, MMP-7, MMP-8, MMP-9, MMP-10, MMP-13, MMP-14, MMP-15, MMP-16 and MMP-19.

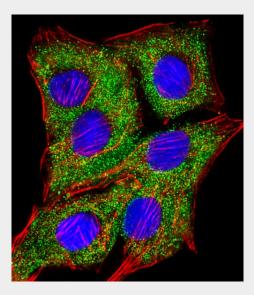
Cellular Location Secreted.

#### **TIMP2 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

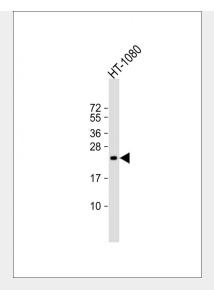
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# **TIMP2 Antibody - Images**

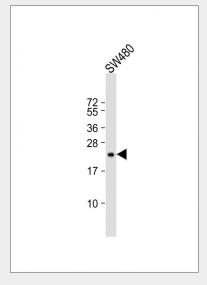


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized A549 (human lung adenocarcinoma epithelial cell line) cells labeling TIMP2 with AM8492b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-mouse IgG (NA166821) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on A549 cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).



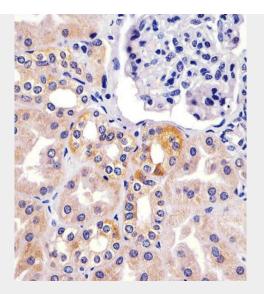


Anti-TIMP2 Antibody at 1:2000 dilution + HT-1080 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 24 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

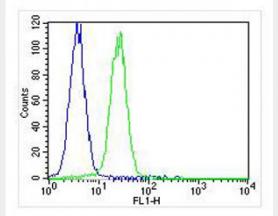


Anti-TIMP2 Antibody at 1:500 dilution + SW480 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 24 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



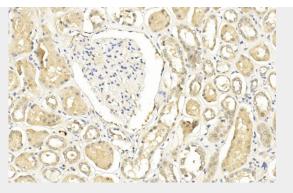


AM8492b staining TIMP2 in human kidney sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Overlay histogram showing K562 cells stained with AM8492b (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AM8492b, 1:25 dilution) for 60 min at 37°C. The secondary antibody Goat-Anti-Mouse 488 used was lgG, **DyLight**® Conjugated Highly Cross-Adsorbed(NA168821) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was mouse  $IgG1 (1\mu g/1x10^6 cells)$  used under the same conditions. Acquisition of >10, 000 events was performed.





Immunohistochemical analysis of paraffin-embedded Human kidney section using Pink1(Cat#AM8492b). AM8492b was diluted at 1:200 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

## TIMP2 Antibody - Background

Complexes with metalloproteinases (such as collagenases) and irreversibly inactivates them by binding to their catalytic zinc cofactor. Known to act on MMP-1, MMP-2, MMP-3, MMP-7, MMP-8, MMP-9, MMP-10, MMP-13, MMP-14, MMP-15, MMP-16 and MMP-19.

#### **TIMP2 Antibody - References**

Stetler-Stevenson W.G., et al.J. Biol. Chem. 265:13933-13938(1990). Boone T.C., et al.Proc. Natl. Acad. Sci. U.S.A. 87:2800-2804(1990). Hammani K., et al.J. Biol. Chem. 271:25498-25505(1996). Malik K., et al.Submitted (AUG-1990) to the EMBL/GenBank/DDBJ databases. Stetler-Stevenson W.G., et al.J. Biol. Chem. 264:17374-17378(1989).