

TIMP3 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9124c**Specification**

TIMP3 Antibody (Center) - Product Information

Application	FC, IHC-P, WB,E
Primary Accession	P35625
Other Accession	P48032 , O97590 , P39876 , P61269 , P79121 , Q9TUL9
Reactivity	Human, Mouse
Predicted	Bovine, Horse, Monkey, Rabbit, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	24145
Antigen Region	113-139

TIMP3 Antibody (Center) - Additional Information**Gene ID** 7078**Other Names**

Metalloproteinase inhibitor 3, Protein MIG-5, Tissue inhibitor of metalloproteinases 3, TIMP-3, TIMP3

Target/Specificity

This TIMP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 113-139 amino acids from the Central region of human TIMP3.

Dilution

FC~~1:10~50

IHC-P~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

TIMP3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

TIMP3 Antibody (Center) - Protein Information

Name TIMP3

Function Mediates a variety of processes including matrix regulation and turnover, inflammation, and angiogenesis, through reversible inhibition of zinc protease superfamily enzymes, primarily matrix metalloproteinases (MMPs). Regulates extracellular matrix (ECM) remodeling through inhibition of matrix metalloproteinases (MMP) including MMP-1, MMP-2, MMP-3, MMP-7, MMP-9, MMP-13, MMP-14 and MMP-15. Additionally, modulates the processing of amyloid precursor protein (APP) and apolipoprotein E receptor ApoER2 by inhibiting two alpha- secretases ADAM10 and ADAM17 (PubMed:[17913923](#)). Functions as a tumor suppressor and a potent inhibitor of angiogenesis. Exerts its anti- angiogenic effect by directly interacting with vascular endothelial growth factor (VEGF) receptor-2/KDR, preventing its binding to the VEGFA ligand (PubMed:[12652295](#)). Selectively induces apoptosis in angiogenic endothelial cells through a caspase-independent cell death pathway (PubMed:[25558000](#)). Mechanistically, inhibits matrix-induced focal adhesion kinase PTK2 tyrosine phosphorylation and association with paxillin/PXN and disrupts the incorporation of ITGB3, PTK2 and PXN into focal adhesion contacts on the matrix (PubMed:[25558000](#)).

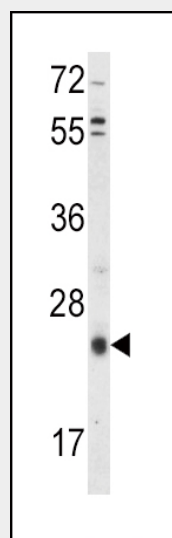
Cellular Location

Secreted, extracellular space, extracellular matrix

TIMP3 Antibody (Center) - Protocols

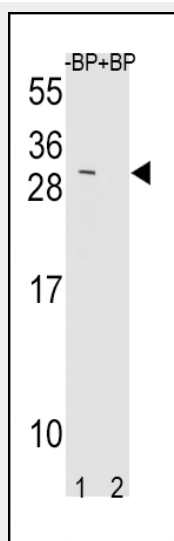
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

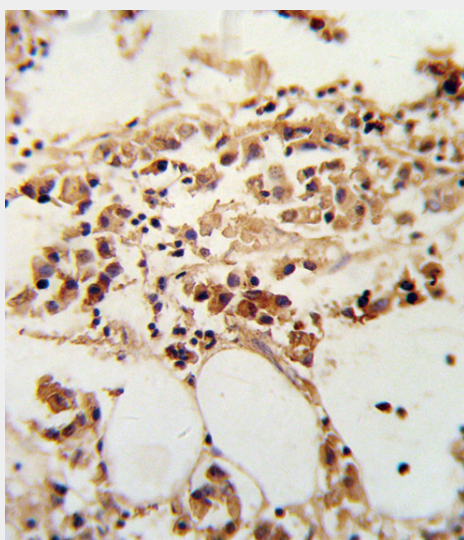
TIMP3 Antibody (Center) - Images

Western blot analysis of TIMP3 Antibody (Center) (Cat. #AP9124c) in HepG2 cell line lysates

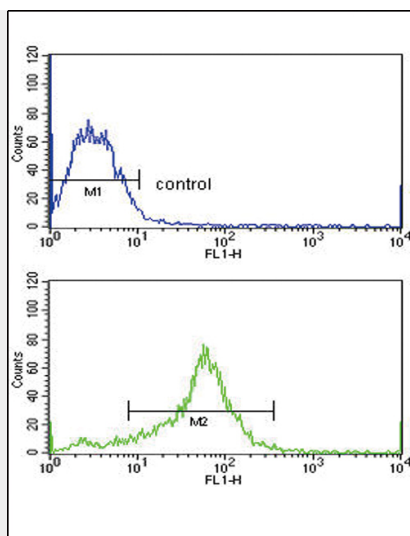
(35ug/lane). TIMP3 (arrow) was detected using the purified Pab.



Western blot analysis of TIMP3 Antibody (Center) Pab (Cat. #AP9124c) pre-incubated without (lane 1) and with (lane 2) blocking peptide in mouse NIH-3T3 cell line lysate. TIMP3 Antibody (Center) (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human breast carcinoma reacted with TIMP3 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



TIMP3 Antibody (Center) (Cat. #AP9124c) flow cytometric analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

TIMP3 Antibody (Center) - Background

TIMP3 is one of inhibitors of the matrix metalloproteinases, a group of peptidases involved in degradation of the extracellular matrix (ECM).

TIMP3 Antibody (Center) - References

Jacobson, S.G., et.al., Nat. Genet. 11 (1), 27-32 (1995) Wick, M., et.al., Biochem. J. 311 (PT 2), 549-554 (1995)