

**TIMP-3 Polyclonal Antibody** 

Catalog # AP72843

### Specification

# TIMP-3 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB <u>P35625</u> Human, Mouse, Rat Rabbit Polyclonal

## **TIMP-3 Polyclonal Antibody - Additional Information**

Gene ID 7078

**Other Names** TIMP3; Metalloproteinase inhibitor 3; Protein MIG-5; Tissue inhibitor of metalloproteinases 3; TIMP-3

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

**Format** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions** -20°C

# **TIMP-3 Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/17913923" target="\_blank">17913923</a>). 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:<a

href="http://www.uniprot.org/citations/12652295" target="\_blank">12652295</a>). Selectively induces apoptosis in angiogenic endothelial cells through a caspase-independent cell death pathway (PubMed:<a href="http://www.uniprot.org/citations/25558000"

target="\_blank">25558000</a>). 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:<a href="http://www.uniprot.org/citations/25558000" target="\_blank">25558000</a>).

### **Cellular Location**

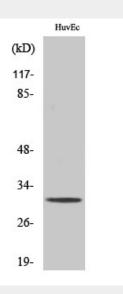
Secreted, extracellular space, extracellular matrix

### TIMP-3 Polyclonal 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>

# **TIMP-3 Polyclonal Antibody - Images**



#### **TIMP-3 Polyclonal Antibody - Background**

Complexes with metalloproteinases (such as collagenases) and irreversibly inactivates them by binding to their catalytic zinc cofactor. May form part of a tissue-specific acute response to remodeling stimuli. Known to act on MMP-1, MMP-2, MMP-3, MMP-7, MMP-9, MMP-13, MMP-14 and MMP-15.