

TIMP3 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51564

Specification

TIMP3 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW

WB, E <u>P35625</u> Human, Mouse, Rat Rabbit Polyclonal 30 KDa

TIMP3 Antibody - Additional Information

Gene ID 7078

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

Dilution WB~~1:1000 E~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

TIMP3 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: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:<a href="http://www.uniprot.org/citations/25558000"

target="_blank">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 - Protocols

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

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

TIMP3 Antibody - Images

TIMP3 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.

TIMP3 Antibody - References

Uria J.A., et al.Cancer Res. 54:2091-2094(1994). Wilde C.G., et al.DNA Cell Biol. 13:711-718(1994). Silbiger S.M., et al.Gene 141:293-297(1994). Wick M., et al.J. Biol. Chem. 269:18953-18960(1994). Stoehr H., et al.Genome Res. 5:483-487(1995).