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TIMP-3 Polyclonal Antibody

Catalog # AP72843

Product Information

Application	WB
Primary Accession	P35625
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24145

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℃

Protein Information

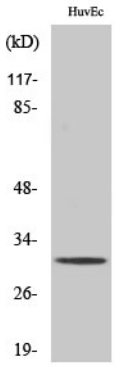
Name	TIMP3
Function	Mediates a variety of processes including matrix regulation and turnover, inflammation, and angiogenesis, through reversible inhibition of zinc protease superfamily enzymes, primarily matrix metalloproteinases (MMPs). Regulates extracellular matrix (ECM) remodeling through inhibition 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

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.

Images



Western Blot analysis of various cells using TIMP-3 Polyclonal Antibody diluted at 1：1000. Secondary antibody was diluted at 1:20000