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TIMP-3 Recombinant Rabbit mAb

Catalog # AP100082

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P35625
Other Accession	P35625
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	24145
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the protease inhibitor I35 (TIMP) family.Contains 1 NTR domain.
SUBUNIT	Interacts with EFEMP1.
Background Descriptions	This gene belongs to the TIMP gene family. The proteins encoded by this gene family are inhibitors of the matrix metalloproteinases, a group of peptidases involved in degradation of the extracellular matrix (ECM). Expression of this gene is induced in response to mitogenic stimulation and this netrin domain-containing protein is localized to the ECM. Mutations in this gene have been associated with the autosomal dominant disorder Sorsby's fundus dystrophy. [provided by RefSeq, Jul 2008],

Additional Information

Gene ID	7078
Other Names	HSMRK222; K222; K222TA2; SFD; Timp-3; TIMP3_HUMAN; TIMP3; Protein MIG-5; Tissue inhibitor of metalloproteinases 3 (TIMP-3); TIMP3_MOUSE; Sun; TIMP3_RAT; TIMP metallopeptidase inhibitor 3; tissue inhibitor of metalloproteinase 3 (Sorsby fundus dystrophy, pseudoinflammatory); Metalloproteinase inhibitor 3; Tissue inhibitor of metalloproteinases 3
Dilution	IHC-P=1:50-200,IHC-F=1:50-200,WB=1:500-2000,IF=1:50-200,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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