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Rabbit Anti-TIMP-2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52136

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P16035
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24399
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TIMP-2
Epitope Specificity	131-220/220
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted.
SIMILARITY	Belongs to the protease inhibitor I35 (TIMP) family.Contains 1 NTR domain.
SUBUNIT	Interacts (via the C-terminal) with MMP2 (via the C-terminal PEX domain); the interaction inhibits the MMP2 activity.
Post-translational modifications	The activity of TIMP2 is dependent on the presence of disulfide bonds.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene is a member of the TIMP gene family. The proteins encoded by this gene family are natural inhibitors of the matrix metalloproteinases, a group of peptidases involved in degradation of the extracellular matrix. In addition to an inhibitory role against metalloproteinases, the encoded protein has a unique role among TIMP family members in its ability to directly suppress the proliferation of endothelial cells. As a result, the encoded protein may be critical to the maintenance of tissue homeostasis by suppressing the proliferation of quiescent tissues in response to angiogenic factors, and by inhibiting protease activity in tissues undergoing remodelling of the extracellular matrix. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	7077
Other Names	DDC8; CSC-21K; KIAA1731NL; Metalloproteinase inhibitor 2; Tissue inhibitor of metalloproteinases 2; TIMP-2; TIMP2
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,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	TIMP2
Function	Complexes with metalloproteinases (such as collagenases) and irreversibly inactivates them by binding to their catalytic zinc cofactor. Known to act on MMP-1, MMP-2, MMP-3, MMP-7, MMP-8, MMP-9, MMP-10, MMP-13, MMP-14, MMP-15, MMP-16 and MMP-19.
Cellular Location	Secreted.

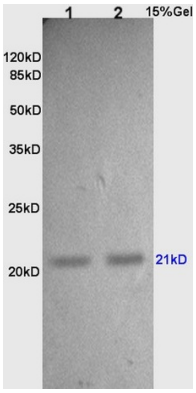
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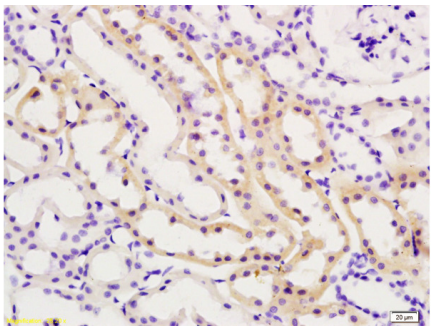
References

Stetler-Stevenson W.G.,et al.J. Biol. Chem. 265:13933-13938(1990).
Boone T.C.,et al.Proc. Natl. Acad. Sci. U.S.A. 87:2800-2804(1990).
Hammani K.,et al.J. Biol. Chem. 271:25498-25505(1996).
Malik K.,et al.Submitted (AUG-1990) to the EMBL/GenBank/DDBJ databases.
Stetler-Stevenson W.G.,et al.J. Biol. Chem. 264:17374-17378(1989).

Images



L1 and L2 rat lung lysates probed with Anti TIMP-2 Polyclonal Antibody, Unconjugated (AP52136) at 1:200 in 4˚C. Followed by conjugation to secondary antibody at 1:3000 90min in 37˚C. Predicted band 24kD. Observed band size: 21kD



Formalin-fixed and paraffin embedded rat kidney tissue labeled with Anti-TIMP-2 Polyclonal Antibody (AP52136), Unconjugated at 1:200, followed by conjugation to the secondary antibody and DAB staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.