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TIMP1 Antibody (N-term) Blocking Peptide

Synthetic peptide

Catalog # BP6709a

Specification

TIMP1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession	P01033
Other Accession	NP_003245

TIMP1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 7076

Other Names
Metalloproteinase inhibitor 1, Erythroid-potentiating activity, EPA, Fibroblast collagenase inhibitor, Collagenase inhibitor, Tissue inhibitor of metalloproteinases 1, TIMP-1, TIMP1, CLGI, TIMP

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6709a was selected from the N-term region of human TIMP1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TIMP1 Antibody (N-term) Blocking Peptide - Background

TIMP1 belongs to the TIMP family. The proteins in this family are natural inhibitors of the matrix metalloproteinases (MMPs), a group of peptidases involved in degradation of the extracellular matrix. In addition to its inhibitory role against most of the known MMPs, the protein is able to promote cell proliferation in a wide range of cell types, and may also have an anti-apoptotic function.

TIMP1 Antibody (N-term) Blocking Peptide - References

Safranek,J., Anticancer Res. 29 (7), 2513-2517 (2009)Onal,I.K., Eur. J. Intern. Med. 20 (4), 369-372 (2009)Okamura,H., Int. J. Oncol. 35 (1), 181-186 (2009)

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Protein Information

Name TIMP1

Synonyms CLGI, TIMP

Function
Metalloproteinase inhibitor that functions by forming one to one complexes with target metalloproteinases, such as collagenases, and irreversibly inactivates them by binding to their catalytic zinc cofactor. Acts on MMP1, MMP2, MMP3, MMP7, MMP8, MMP9, MMP10, MMP11, MMP12, MMP13 and MMP16. Does not act on MMP14. Also functions as a growth factor that regulates cell differentiation, migration and cell death and activates cellular signaling cascades via CD63 and ITGB1. Plays a role in integrin signaling. Mediates erythropoiesis in vitro; but, unlike IL3, it is species-specific, stimulating the growth and differentiation of only human and murine erythroid progenitors.

Cellular Location
Secreted

Tissue Location
Detected in rheumatoid synovial fluid (at protein level).

TIMP1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides