

TIMP1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11199b

Specification

TIMP1 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality	IF, WB, IHC-P, FC,E <u>P01033</u> <u>NP_003245</u> Human Rabbit Polyclonal Pabbit IgG
Isotype	Rabbit IgG
Calculated MW	23171
Antigen Region	157-188

TIMP1 Antibody (C-term) - 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

This TIMP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 157-188 amino acids from the C-terminal region of human TIMP1.

Dilution IF~~1:10~50 WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TIMP1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TIMP1 Antibody (C-term) - 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

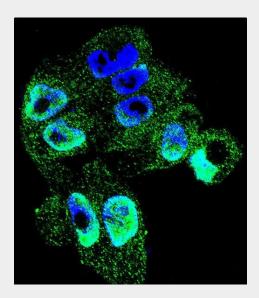
Tissue Location Detected in rheumatoid synovial fluid (at protein level).

TIMP1 Antibody (C-term) - Protocols

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

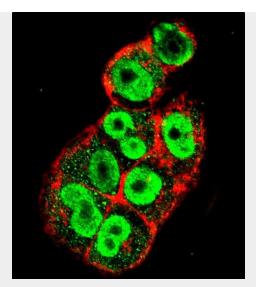
- Western Blot
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TIMP1 Antibody (C-term) - Images

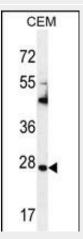


Confocal immunofluorescent analysis of TIMP1 Antibody (C-term)(Cat#AP11199b) with A2058 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).

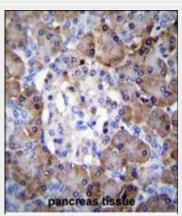




Confocal immunofluorescent analysis of TIMP1 Antibody (C-term)(Cat#AP11199b) with A2058 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).

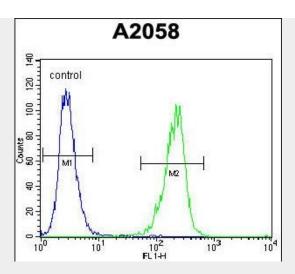


TIMP1 Antibody (C-term) (Cat. #AP11199b) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the TIMP1 antibody detected the TIMP1 protein (arrow).



TIMP1 Antibody (C-term) (Cat. #AP11199b)immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of TIMP1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.





TIMP1 Antibody (C-term) (Cat. #AP11199b) flow cytometric analysis of A2058 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

TIMP1 Antibody (C-term) - Background

This gene belongs to the TIMP gene family. The proteins encoded by this gene 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 encoded protein is able to promote cell proliferation in a wide range of cell types, and may also have an anti-apoptotic function. Transcription of this gene is highly inducible in response to many cytokines and hormones. In addition, the expression from some but not all inactive X chromosomes suggests that this gene inactivation is polymorphic in human females. This gene is located within intron 6 of the synapsin I gene and is transcribed in the opposite direction.

TIMP1 Antibody (C-term) - References

Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010) : Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Lin, C.C., et al. Clin J Am Soc Nephrol 5(10):1805-1814(2010) Yeh, Y.C., et al. BMC Microbiol. 10, 218 (2010) : Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) :