

AM05381PU-N**Monoclonal Antibody to TIMP1 - Purified**

Alternate names:	CLGI, EPA, Erythroid-potentiating activity, Fibroblast collagenase inhibitor, Metalloproteinase inhibitor 1, TIMP, TIMP-1, Tissue inhibitor of metalloproteinases
Quantity:	0.2 mg
Concentration:	Lot specific
Background:	TIMP-1, TIMP-2, TIMP-3 and TIMP-4 (for tissue inhibitor of metalloproteinases-1, -2, -3 and -4) complex with metalloproteinases such as collagenases, gelatinases and stromelysins, resulting in irreversible inactivation of the metalloproteinase. TIMP-1 was found to be identical to EPA (erythroidpotentiation activity). Parathyroid hormone has been shown to be a regulator of TIMP-2 in osteoblastic cells. TIMP-3 may be involved in regulating trophoblastic invasion of the uterus as well as in regulating remodeling of the extracellular matrix during the folding of epithelia, and in the formation, branching and expansion of epithelial tubes. TIMP-4 is most highly expressed in heart and low levels of TIMP-4 are expressed in liver, brain, lung, thymus and spleen.
Uniprot ID:	P01033
NCBI:	NP_003245.1
GeneID:	7076
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	2A5
Immunogen:	Hybridoma produced by the fusion of splenocytes from BALB/c mice
Format:	State: Liquid purified Ig Buffer System: Phosphate buffered saline with 0.08% sodium azide
Applications:	ELISA. Immunohistochemistry on paraffin sections: 1 - 5 µg/ml. Western Blot: 1 - 2 µg/ml. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody reacts to Tissue Inhibitor of Matrix Metalloproteinase 1. Species: Human, Macaca. Other species not tested.
Storage:	The antibody can be shipped at ambient temperature. Store (in aliquots) at -20°C only. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

1. Hoikkala S, Pääkkö P, Soini Y, Mäkitaro R, Kinnula V, Turpeenniemi-Hujanen T. Tissue MMP-2 and MMP-9 [corrected] are better prognostic factors than serum MMP-2/TIMP-2-complex or TIMP-1 [corrected] in stage [corrected] I-III lung carcinoma. *Cancer Lett.* 2006 May 8;236(1):125-32. Epub 2005 Jun 27. PubMed PMID: 15982804.
2. Bodden MK, Harber GJ, Birkedal-Hansen B, Windsor LJ, Caterina NC, Engler JA, et al. Functional domains of human TIMP-1 (tissue inhibitor of metalloproteinases). *J Biol Chem.* 1994 Jul 22;269(29):18943-52. PubMed PMID: 7518446.

Pictures:

Left: Immunohistochemical staining of human colon carcinoma tissue using TIMP-1 antibody. Right: Western blot using TIMP-1 antibody against recombinant human TIMP-1 proenzyme (400 ng/lane).

