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AM05382PU-N Monoclonal Antibody to TIMP2 - Purified

Alternate names:	CSC-21K, Metalloproteinase inhibitor 2, TIMP-2, Tissue inhibitor of metalloproteinases 2
Quantity:	0.2 mg
Concentration:	0.95 mg/ml
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:	P16035
NCBI:	NP_003246.1
GeneID:	7077
Host / Isotype:	Mouse / IgG2a
Recommended Isotype Controls:	AM03096PU-N
Clone:	3A4
Immunogen:	Hybridoma produced by the fusion of splenocytes from BALB/c mice immunized with a synthetic peptide derived from the Human TIMP-2 protein and mouse myeloma Ag8563 cells.
Format:	**State:** Liquid purified IgG fraction **Purification:** Affinity Chromatography on Protein A/G **Buffer System:** PBS **Preservatives:** 0.08% Sodium Azide
Applications:	**ELISA.** **Western Blot:** 1 - 2 µg/ml. **Immunohistochemistry on Paraffin Sections:** 5-10 µg/ml. *Positive Control:* Colon and gastric tissues. Stronger expressions observed in tumor versus normal proteins. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	18.5-21 kDa
Specificity:	This antibody recognizes Matrix Metalloproteinase 2 (TIMP2).

Species Reactivity:

Tested: Human.
Expected from sequence similarity: Mouse, Rabbit, Chicken, Zebrafish, Pig.

Storage:

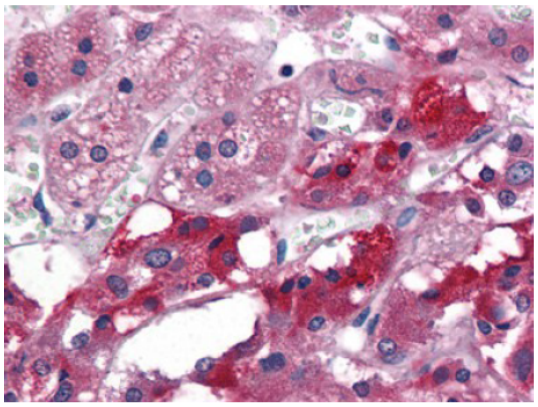
Upon receipt, store (in aliquots) at -20°C to -80°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

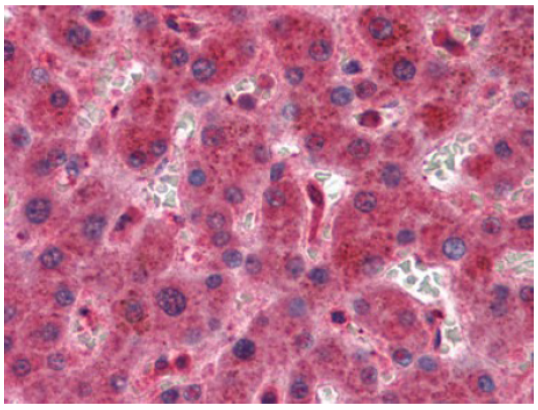
1. Hoikkala S, Pääkkö P, Soini Y, Mäkitaro R, Kinnula V, Turpeenniemi-Hujanen T. Tissue MMP-2 and MMP-9 [corrected] are better prognostic factors than serum MMP-2/TIMP-2--complex or TIMP-1 [corrected] in stage [corrected] I-III lung carcinoma. Cancer Lett. 2006 May 8;236(1):125-32. Epub 2005 Jun 27. PubMed PMID: 15982804.
2. Ring P, Johansson K, Höyhtyä M, Rubin K, Lindmark G. Expression of tissue inhibitor of metalloproteinases TIMP-2 in human colorectal cancer--a predictor of tumour stage. Br J Cancer. 1997;76(6):805-11. PubMed PMID: 9310250.

Pictures:

Formalin-Fixed, Paraffin-Embedded Human Adrenal tissue stained with TIMP2 Antibody Cat.-No AM05382PU-N at 5 µg/ml after heat-induced antigen retrieval.



Formalin-Fixed, Paraffin-Embedded Human Liver tissue stained with TIMP2 Antibody Cat.-No AM05382PU-N at 5 µg/ml after heat-induced antigen retrieval.



Left: Immunohistochemical staining of human colon carcinoma tissue using TIMP2 Antibody Cat.-No AM05382PU-N. Right: Western blot using TIMP-2 antibody on recombinant human TIMP-2 proenzyme (400 ng/lane).