

TIMP-1 (C-20): sc-6832



The Power to Question

BACKGROUND

TIMP-1, TIMP-2, TIMP-3 and TIMP-4 (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 has been found to be identical to EPA (erythroid-potential 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 and 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, with low levels expressed in liver, brain, lung, thymus and spleen.

CHROMOSOMAL LOCATION

Genetic locus: TIMP1 (human) mapping to Xp11.23.

SOURCE

TIMP-1 (C-20) is available as either goat (sc-6832) or rabbit (sc-6832-R) affinity purified polyclonal antibody raised against a peptide mapping at the C-terminus of TIMP-1 of human origin.

PRODUCT

Each vial contains either 100 µg (sc-6832) or 200 µg (sc-6832-R) IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6832 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TIMP-1 (C-20) is recommended for detection of TIMP-1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TIMP-1 (C-20) is also recommended for detection of TIMP-1 in additional species, including equine and bovine.

Suitable for use as control antibody for TIMP-1 siRNA (h): sc-29505, TIMP-1 shRNA Plasmid (h): sc-29505-SH and TIMP-1 shRNA (h) Lentiviral Particles: sc-29505-V.

Molecular Weight of TIMP-1: 23 kDa.

Molecular Weight of glycosylated TIMP-1: 28 kDa.

Positive Controls: TIMP-1 (h): 293 Lysate: sc-110547.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

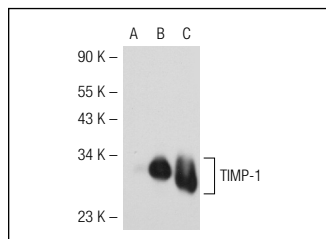
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

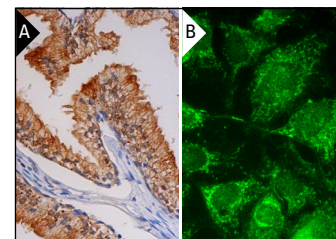
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



TIMP-1 (C-20)-R: sc-6832-R. Western blot analysis of TIMP-1 expression in non-transfected: sc-117752 (A) and human TIMP-1 transfected: sc-110547 (B) 293T whole cell lysates and truncated human recombinant TIMP-1 fusion protein (C).



TIMP-1 (C-20): sc-6832. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing cytoplasmic and membrane staining of glandular cells (A). Immunofluorescence staining of methanol-fixed Hep G2 cells showing cytoplasmic localization (B).

SELECT PRODUCT CITATIONS

- Sharma, R., et al. 2004. Prognostic significance of stromelysin-3 and tissue inhibitor of matrix metalloproteinase-2 in esophageal cancer. *Oncology* 67: 300-309.
- Morikawa, A., et al. 2008. Selective progesterone receptor modulator asoprisnil down-regulates collagen synthesis in cultured human uterine leiomyoma cells through up-regulating extracellular matrix metalloproteinase inducer. *Hum. Reprod.* 23: 944-951.
- Xu, Q., et al. 2008. Progesterone receptor modulator CDB-2914 induces extracellular matrix metalloproteinase inducer in cultured human uterine leiomyoma cells. *Mol. Hum. Reprod.* 14: 181-191.
- Derer, S., et al. 2009. A possible link between TIMP-1 induction and response to infliximab. *Gut* 58: 888.
- Horn, M.A., et al. 2012. Age-related divergent remodeling of the cardiac extracellular matrix in heart failure: collagen accumulation in the young and loss in the aged. *J. Mol. Cell. Cardiol.* 53: 82-90.
- Yamada, Y., et al. 2013. Postinfarct active cardiac-targeted delivery of erythropoietin by liposomes with sialyl Lewis X repairs infarcted myocardium in rabbits. *Am. J. Physiol. Heart Circ. Physiol.* 304: H1124-H1133.
- Machado, D., et al. 2013. Irradiated riboflavin diminishes the aggressiveness of melanoma *in vitro* and *in vivo*. *PLoS ONE* 8: e54269.

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Try **TIMP-1 (G-6): sc-365905** or **TIMP-1 (SPM355): sc-56489**, our highly recommended monoclonal alternatives to TIMP-1 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **TIMP-1 (G-6): sc-365905**.