

TIMP-1 (H-150): sc-5538

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 (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 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.

CHROMOSOMAL LOCATION

Genetic locus: TIMP1 (human) mapping to Xp11.23; Timp1 (mouse) mapping to X A1.3.

SOURCE

TIMP-1 (H-150) is a rabbit polyclonal antibody raised against amino acids 58-207 of TIMP-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TIMP-1 (H-150) is available conjugated to agarose (sc-5538 AC), 500 µg/0.25 ml agarose in 1 ml, for IP.

APPLICATIONS

TIMP-1 (H-150) is recommended for detection of TIMP-1 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TIMP-1 (H-150) is also recommended for detection of TIMP-1 in additional species, including bovine.

Suitable for use as control antibody for TIMP-1 siRNA (h): sc-29505, TIMP-1 siRNA (m): sc-37274, TIMP-1 shRNA Plasmid (h): sc-29505-SH, TIMP-1 shRNA Plasmid (m): sc-37274-SH, TIMP-1 shRNA (h) Lentiviral Particles: sc-29505-V and TIMP-1 shRNA (m) Lentiviral Particles: sc-37274-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.

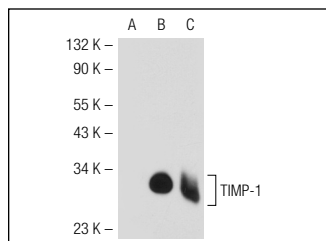
PROTOCOLS

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 (H-150): sc-5538. 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).

SELECT PRODUCT CITATIONS

- Apparailly, F., et al. 2001. Paradoxical effects of tissue inhibitor of metalloproteinases 1 gene transfer in collagen-induced arthritis. *Arthritis Rheum.* 44: 1444-1454.
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- Phillips, L.M., et al. 2011. The renin inhibitor aliskiren attenuates high-glucose induced extracellular matrix synthesis and prevents apoptosis in cultured podocytes. *Nephron Exp. Nephrol.* 118: e49-e59.
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- Toledo, A.C., et al. 2012. Aerobic exercise attenuates pulmonary injury induced by exposure to cigarette smoke. *Eur. Respir. J.* 39: 254-264.
- Zhang, Q., et al. 2012. Expression of CD82 in human trophoblast and its role in trophoblast invasion. *PLoS ONE* 7: e38487.
- Patrino, A., et al. 2012. Activity of matrix metallo proteinases (MMPs) and the tissue inhibitor of MMP (TIMP)-1 in electromagnetic field-exposed THP-1 cells. *J. Cell. Physiol.* 227: 2767-2774.



Try **TIMP-1 (G-6): sc-365905** or **TIMP-1 (SPM355): sc-56489**, our highly recommended monoclonal alternatives to TIMP-1 (H-150). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **TIMP-1 (G-6): sc-365905**.