

TIMP-1 (h3): 293 Lysate: sc-110547

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-potentiating 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.

REFERENCES

1. Docherty, A.J., Lyons, A., Smith, B.J., Wright, E.M., Stephens, P.E., Harris, T.J., Murphy, G. and Reynolds, J.J. 1985. Sequence of human tissue inhibitor of metalloproteinases and its identity to erythroid-potentiating activity. *Nature* 318: 66-69.
2. Carmichael, D.F., Sommer, A., Thompson, R.C., Anderson, D.C., Smith, C.G., Welgus, H.G. and Stricklin, G.P. 1986. Primary structure and cDNA cloning of human fibroblast collagenase inhibitor. *Proc. Natl. Acad. Sci. USA* 83: 2407-2411.
3. Cook, T.F., Burke, J.S., Bergman, K.D., Quinn, C.O., Jeffrey, J.J. and Partridge, N.C. 1994. Cloning and regulation of rat tissue inhibitor of metalloproteinase-2 in osteoblastic cells. *Arch. Biochem. Biophys.* 311: 313-320.
4. Silbiger, S.M., Jacobsen, V.L., Cupples, R.L. and Koski, R.A. 1994. Cloning of cDNAs encoding human TIMP-3, a novel member of the tissue inhibitor of metalloproteinase family. *Gene* 141: 293-297.
5. Apte, S.S., Hayashi, K., Seldin, M.F., Mattei, M.G., Hayashi, M. and Olsen, B.R. 1994. Gene encoding a novel murine tissue inhibitor of metalloproteinases (TIMP), TIMP-3, is expressed in developing mouse epithelia, cartilage and muscle, and is located on mouse chromosome 10. *Dev. Dyn.* 200: 177-197.

CHROMOSOMAL LOCATION

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

PRODUCT

TIMP-1 (h3): 293 Lysate represents a lysate of human TIMP-1 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

TIMP-1 (h3): 293 Lysate is suitable as a Western Blotting positive control for human reactive TIMP-1 antibodies.

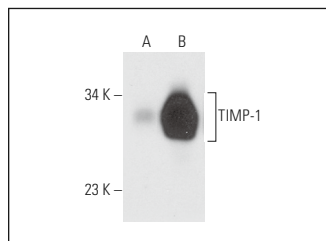
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

TIMP-1 (H-150): sc-5538 is recommended as a positive control antibody for Western Blot analysis of enhanced human TIMP-1 expression in TIMP-1 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

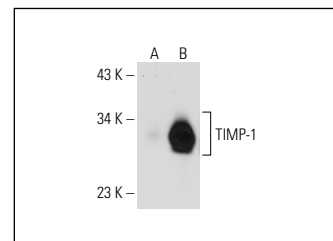
STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

DATA



TIMP-1 (SPM355): sc-56489. Western blot analysis of TIMP-1 expression in non-transfected: sc-110760 (A) and human TIMP-1 transfected: sc-110547 (B) 293 whole cell lysates.



TIMP-1 (102D1): sc-58435. Western blot analysis of TIMP-1 expression in non-transfected: sc-117752 (A) and human TIMP-1 transfected: sc-110547 (B) 293 whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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