

TIMP-2 (H-140): sc-5539



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 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: TIMP2 (human) mapping to 17q25.3; Timp2 (mouse) mapping to 11 E2.

SOURCE

TIMP-2 (H-140) is a rabbit polyclonal antibody raised against amino acids 81-220 of TIMP-2 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.

APPLICATIONS

TIMP-2 (H-140) is recommended for detection of TIMP-2 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), 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-2 (H-140) is also recommended for detection of TIMP-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TIMP-2 siRNA (h): sc-29506, TIMP-2 siRNA (m): sc-37275, TIMP-2 shRNA Plasmid (h): sc-29506-SH, TIMP-2 shRNA Plasmid (m): sc-37275-SH, TIMP-2 shRNA (h) Lentiviral Particles: sc-29506-V and TIMP-2 shRNA (m) Lentiviral Particles: sc-37275-V.

Molecular Weight of TIMP-2: 21 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, human lung extract: sc-363767 or human salivary gland extract: sc-363762.

STORAGE

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

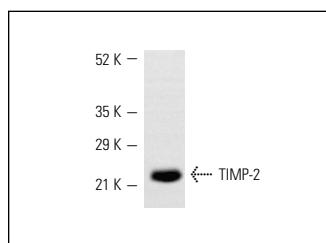
PROTOCOLS

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

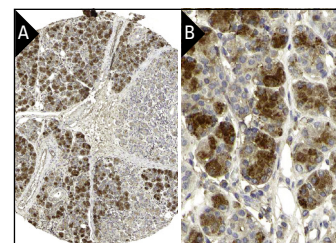
RESEARCH USE

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

DATA



TIMP-2 (H-140): sc-5539. Western blot analysis of human recombinant TIMP-2.



TIMP-2 (H-140): sc-5539. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing cytoplasmic staining of glandular cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

- Ess, K.C., et al. 2004. Expression profiling in tuberous sclerosis complex (TSC) knockout mouse astrocytes to characterize human TSC brain pathology. *Glia* 46: 28-40.
- Funada, Y., et al. 2004. Imbalance of matrix metalloproteinase-9 and tissue inhibitor of matrix metalloproteinase-1 is associated with pulmonary emphysema in klotho mice. *Kobe J. Med. Sci.* 50: 59-67.
- San-Miguel, B., et al. 2010. Glutamine prevents fibrosis development in rats with colitis induced by 2,4,6-trinitrobenzene sulfonic acid. *J. Nutr.* 140: 1065-1071.
- Wang, K.T., et al. 2010. Gastroprotective activity of atractylenolide III from *Atractylodes ovata* on ethanol-induced gastric ulcer *in vitro* and *in vivo*. *J. Pharm. Pharmacol.* 62: 381-388.
- Santos, A., et al. 2011. Immunohistochemical evaluation of MMP-2 and TIMP-2 in canine mammary tumours: a survival study. *Vet. J.* 190: 396-402.
- Bret, C., et al. 2011. Gene expression profile of ADAMs and ADAMTS metalloproteinases in normal and malignant plasma cells and in the bone marrow environment. *Exp. Hematol.* 39: 546-557.e8.
- Bilbao, M.G., et al. 2011. Differential effects of leptin on ovarian metalloproteinases and their tissue inhibitors between *in vivo* and *in vitro* studies. *J. Endocrinol.* 209: 65-74.
- Zhang, Q., et al. 2012. Expression of CD82 in human trophoblast and its role in trophoblast invasion. *PLoS ONE* 7: e38487.



Try **TIMP-2 (3A4): sc-21735** or **TIMP-2 (B-12): sc-365671**, our highly recommended monoclonal alternatives to TIMP-2 (H-140). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **TIMP-2 (3A4): sc-21735**.