

# TIMP-2 (C-20): sc-6835



The Power to Question

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

## SOURCE

TIMP-2 (C-20) is available as either goat (sc-6835) or rabbit (sc-6835-R) affinity purified polyclonal antibody raised against a peptide mapping near the C-terminus 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.

Blocking peptide available for competition studies, sc-6835 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TIMP-2 (C-20) 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 (C-20) is also recommended for detection of TIMP-2 in additional species, including equine, canine, bovine, porcine and avian.

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, WI-38 whole cell lysate: sc-364260 or human lung extract: sc-363767.

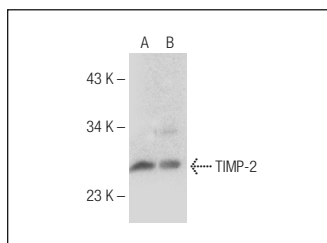
## STORAGE

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

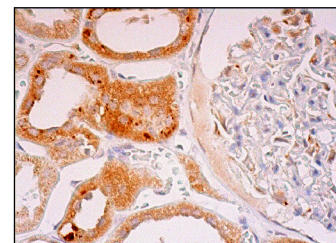
## RESEARCH USE

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

## DATA



TIMP-2 (C-20)-R: sc-6835-R. Western blot analysis of TIMP-2 expression in HeLa (A) and WI-38 (B) whole cell lysates.



TIMP-2 (C-20): sc-6835. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in glomeruli and cells in tubules.

## SELECT PRODUCT CITATIONS

- Guo, C., et al. 2003. Type I collagen-induced MMP-2 activation coincides with upregulation of membrane type 1-matrix metalloproteinase and TIMP-2 in cardiac fibroblasts. *J. Biol. Chem.* 278: 46699-46708.
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- 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.
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- Wu, Z., et al. 2014. Biglycan and decorin differentially regulate signaling in the fetal membranes. *Matrix Biol.* 35: 266-275.
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Try **TIMP-2 (3A4): sc-21735** or **TIMP-2 (B-12): sc-365671**, our highly recommended monoclonal alternatives to TIMP-2 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **TIMP-2 (3A4): sc-21735**.