SANTA CRUZ BIOTECHNOLOGY, INC.

TIMP-2 (L-17): sc-9905

SANTA CRUZ BIOTECHNOLOGY

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 was found to be identical to EPA (erythroid-potentiation 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 (L-17) is an affinity purified goat 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-9905 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TIMP-2 (L-17) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TIMP-2 (L-17) 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 or human lung extract: sc-363767.

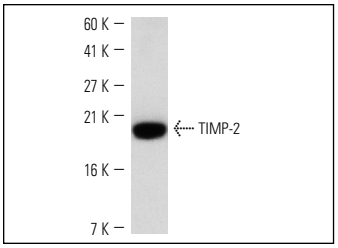
STORAGE

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

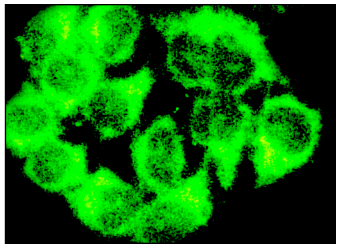
RESEARCH USE

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

DATA



TIMP-2 (L-17): sc-9905. Western blot analysis of human recombinant TIMP-2.



TIMP-2 (L-17): sc-9905. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Briest, W., et al. 2001. Cardiac remodeling after long term norepinephrine treatment in rats. Cardiovasc. Res. 52: 265-273.
2. Leicht, M., et al. 2001. Serum depletion induces cell loss of rat cardiac fibroblasts and increased expression of extracellular matrix proteins in surviving cells. Cardiovasc. Res. 52: 429-437.
3. Chen, W., et al. 2007. Differential expression of matrix metalloproteinases and tissue-derived inhibitors of metalloproteinase in fetal and adult skins. Int. J. Biochem. Cell Biol. 39: 997-1005.
4. 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.
5. 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.
6. Mishra, A., et al. 2011. Downregulation of matrix metalloproteinase-9 by melatonin during prevention of alcohol-induced liver injury in mice. Biochimie 93: 854-866.

PROTOCOLS

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