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-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 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: TIMP3 (human) mapping to 22q12.3; Timp3 (mouse) mapping to 10 C1.

SOURCE
TIMP-3 (B-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 181-210 at the C-terminus of TIMP-3 of human origin.

PRODUCT
Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-373839 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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.

APPLICATIONS
TIMP-3 (B-2) is recommended for detection of TIMP-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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-3 (B-2) is also recommended for detection of TIMP-3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TIMP-3 siRNA (h): sc-37022, TIMP-3 siRNA (m): sc-37023, TIMP-3 shRNA Plasmid (h): sc-37022-SH, TIMP-3 shRNA Plasmid (m): sc-37023-SH, TIMP-3 shRNA (h) Lentiviral Particles: sc-37022-V and TIMP-3 shRNA (m) Lentiviral Particles: sc-37023-V.

Molecular Weight of TIMP-3: 30 kDa.

Positive Controls: mouse placenta extract: sc-364247.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Lumino Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA

SELECT PRODUCT CITATIONS


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