**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 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: TIMP1 (human) mapping to Xp11.23; Timp1 (mouse) mapping to X A1.3.

**SOURCE**

TIMP-1 (2A5) is a mouse monoclonal antibody raised against a synthetic peptide.

**PRODUCT**

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

TIMP-1 (2A5) is available conjugated to agarose (sc-21734 AC), 500 µg/0.25 ml agarose in 1 ml, for IF, to HRP (sc-21734 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-21734 FITC), Alexa Fluor® 488 (sc-21734 AF488), Alexa Fluor® 546 (sc-21734 AF546), Alexa Fluor® 594 (sc-21734 AF594) or Alexa Fluor® 647 (sc-21734 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and CM; and to either Alexa Fluor® 680 (sc-21734 AF680) or Alexa Fluor® 790 (sc-21734 AF790), 200 µg/ml, for Near Infrared (NIR) WB, IF and CM.

**APPLICATIONS**

TIMP-1 (2A5) is recommended for detection of TIMP-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) by starting dilution 1:50, dilution range 1:50-1:500.

Suitable for use as control antibody for TIMP-1 siRNA (h): sc-29505, TIMP-1 siRNA (m): sc-37274, TIMP-1 shRNA Plasmid (h): sc-29505-SH, TIMP-1 shRNA Plasmid (m): sc-37274-SH, TIMP-1 shRNA (h) Lentiviral Particles: sc-29505-V and TIMP-1 shRNA (m) Lentiviral Particles: sc-37274-V.

Molecular Weight of TIMP-1: 23 kDa.

Molecular Weight of glycosylated TIMP-1: 28 kDa.

**RESEARCH USE**

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

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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