**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 11E2.

**SOURCE**

TIMP-2 (3A4) is a mouse monoclonal antibody raised against amino acids 56-66 of TIMP-2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TIMP-2 (3A4) is available conjugated to agarose (sc-21735 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-21735 HRP), 200 µg/ml, for WB, IHCP and ELISA; and to either phycoerythrin (sc-21735 FITC), Alexa Fluor® 488 (sc-21735 AF488) or Alexa Fluor® 647 (sc-21735 AF647), 200 µg/ml, for IF, IHCP and FCM.

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**APPLICATIONS**

TIMP-2 (3A4) 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).


Molecular Weight of TIMP-2: 21 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 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.

**SELECT PRODUCT CITATIONS**