



MOUSE ANTI-BOVINE TIMP-1 MONOCLONAL ANTIBODY

CATALOG NUMBER:	MAB3300	QUANTITY:	100 µg
LOT NUMBER:		CONCENTRATION:	2 mg/mL
ALTERNATE NAMES:	Tissue Inhibitor of Metalloproteinase-1	EPITOPE:	Unknown
CLONE NAME:	7-6C1	HOST/ISOTYPE:	IgG1κ
BACKGROUND:	Tissue Inhibitors of Metalloproteinases (TIMPs) inhibit the proteolytic invasiveness of tumor cells and normal placental trophoblast cells. TIMP-1 and TIMP-2 have similar properties, specifically in inhibiting enzymes of matrix metalloproteinase family, and are thought to be of great importance in the maintenance of connective tissue integrity. TIMP-1 forms a complex of 1:1 stoichiometry with activated interstitial collagenase, activated stromelysin, active form of 72 kDa type IV collagenase (also known as MMP-2 or gelatinase A), and latent and active forms 92 kDa Type IV collagenase (also known as MMP-9 or gelatinase B). TIMP-1 levels in quiescent cells and tissues is low (pg/ml), and stimulation with the phorbol ester TPA or protein concentration is often needed to visualize protein bands. In addition, cell types differ greatly in the amount of TIMP-1 produced.		
SPECIFICITY:	MAB3300 is a purified mouse monoclonal antibody to bovine tissue inhibitor of metalloproteinases-1 (bovine TIMP-1). The antibody specifically reacts with bovine TIMP-1 and cross-reacts with human and rat TIMP-1, but not with mouse TIMP-1. By western blot the antibody recognizes a glycoprotein of 28.5 kDa, which is identified as tissue inhibitor of metalloproteinases-1 (TIMP-1).		
APPLICATIONS:	<u>Immunoblotting:</u> 1:1000, identifies a band of approximately 30KDa. Note TIMP-1 is found in very low concentrations in most cells and tissues. Positive control is HT1080 cells treated with PMA or recombinant TIMP-1 protein CC3328. <u>Immunohistochemistry</u> on frozen sections or acetone fixed tissues. Formalin fixed paraffin-embedded tissue sections are usually not reactive. PLP fixation is suggested as an alternative for paraffin embedded tissue sections. <u>EIA</u> Optimal working dilutions must be determined by the end user.		
SPECIES REACTIVITY:	Reacts with Bovine, Human, Rat. Does not react with Mouse. Reactivity with other species has not been confirmed.		
IMMUNOGEN:	Bovine TIMP-1		
PRESENTATION:	Purified immunoglobulin presented as a liquid in 0.1 M Na-Phosphate buffer, pH 7.0 containing protease free bovine serum albumin.		
STORAGE/HANDLING:	Maintain frozen at -20°C in undiluted aliquots for up to 12 months from date of receipt. Avoid repeated freeze-thaw cycles.		
REFERENCES:	Agapova, O. A. <i>et al.</i> (2001). Expression of matrix metalloproteinases and tissue inhibitors of metalloproteinases in human optic nerve head astrocytes. <i>Glia</i> 33:205-216. Romanic, A. <i>et al.</i> (1998). Matrix metalloproteinase expression increases after cerebral focal ischemia in rats. <i>Stroke</i> 29:1020-1030.		



Kodama, S. *et al.* (1990). Rapid one-step sandwich enzyme immunoassay for tissue inhibitor of metalloproteinases. An application for rheumatoid arthritis serum and plasma. *J. Immunol. Methods* **127**:103-108.

Kodama, S. *et al.* (1987). Monoclonal antibodies to bovine collagenase inhibitor. *Collagen Rel. Res.* **7**:341-350.

Important Note: During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 μ L or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.

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PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION

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