Mouse TIMP-1 Antibody

Monoclonal Rat IgG_{2B} Clone # 151620

Catalog Number: MAB980

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse TIMP-1 in ELISAs. In sandwich ELISAs, no cross-reactivity or interference was observed with recombinant human (rh) TIMP-1, rhTIMP-2, rhTIMP-3, rhTIMP-4, or rrTIMP-1.
Source	Monoclonal Rat IgG_{2B} Clone # 151620
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse TIMP-1 Cys25-Arg205 Accession # P12032
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Mouse TIMP-1 Sandwich Immunoassay		**Reagent**
ELISA Capture	2-8 µg/mL	Mouse TIMP−1 Antibody (Catalog # MAB980)
ELISA Detection	0.1-0.4 µg/mL	Mouse TIMP−1 Biotinylated Antibody (Catalog # BAF980)
Standard		Recombinant Mouse TIMP−1 (Catalog # 980-MT)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Tissue inhibitors of metalloproteinases or TIMPs are a family of homologous proteins that regulate the activity of matrix metalloproteinases (MMPs) (1, 2). There are four known members of the family, TIMP-1, TIMP-2, TIMP-3, and TIMP-4 that have been found to exhibit multiple functions, including inhibition of active MMPs, proMMP activation, cell growth promotion, matrix binding, inhibition of angiogenesis and the induction of apoptosis. Structurally, TIMPs have two domains, an N-terminal domain and a C-terminal domain. Each domain consists of three disulfide-bonded loops. TIMP-1 is a glycoprotein produced by a wide range of cell types. Through its N-terminal domain, TIMP-1 inhibits active MMPs by forming a non-covalent binary complex with the MMP active site. The C-terminal domain of TIMP-1 interacts with the C-terminal domain of pro-MMP-9, which may play a role in regulating pro-MMP-9 activation.

References:

1. Murphy, G. and F. Willenbrock (1995) Methods Enzymol. **248**:496.
2. Brew, K. *et al.* (2000) Biochim. Biophys. Acta **1477**:267.