

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse TIMP-1 in direct ELISAs and Western blots. Shows 100% cross-reactivity with recombinant rat TIMP-1 and 20% cross-reactivity with recombinant human TIMP-1.
Source	Monoclonal Rat IgG _{2A} Clone # 151624
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
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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, pro-MMP 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.

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