

DESCRIPTION

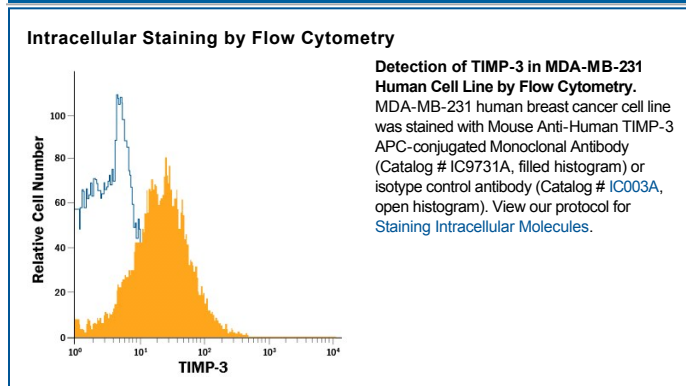
Species Reactivity	Human
Specificity	Detects human TIMP-3 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) TIMP-1, -2, or -4 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 277128
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human TIMP-3 Cys24-Pro211 Accession # P35625
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	10 μ L/10 ⁶ cells	See Below

DATA



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. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Tissue inhibitors of metalloproteinases (TIMPs) are a family of proteins that regulate the activation and proteolytic activity of the zinc enzymes known as matrix metalloproteinases (MMPs). There are four members of the family, TIMP-1, TIMP-2, TIMP-3 and TIMP-4. TIMP-3 is a glycoprotein with a molecular mass of 30 kDa produced by a wide range of cell types. TIMP-3 inhibits active MMP-mediated proteolysis by forming a non-covalent binary complex with the MMP active site through its N-terminal domain. In addition, TIMP-3 is the only known member of the TIMP family that is an effective inhibitor of ADAMs such as TACE.

TIMP-3 is unique among the TIMPs because of its high affinity for binding to the extracellular matrix. Point mutations in the TIMP-3 C-terminal domain have been reported to result in Sorsby's fundus dystrophy, a disease leading to macular degeneration and loss of vision.