# Human MMP-2 PE-conjugated Antibody

Monoclonal Mouse $IgG_{2A}$ Clone # 1A10

Catalog Number: IC9023P

100 Tests

## DESCRIPTION

| | |
|---|---|
| **Species Reactivity** | Human |
| **Specificity** | Detects the pro and active forms of human MMP-2 in Western blots. In dot blots, no cross-reactivity with recombinant human MMP-1, -3, -7, -8, -9, -10, -12, or -13 is observed. |
| **Source** | Monoclonal Mouse $IgG_{2A}$ Clone # 1A10 |
| **Purification** | Protein A or G purified from hybridoma culture supernatant |
| **Immunogen** | Chinese hamster ovary cell line CHO-derived recombinant human MMP-2<br>Accession # P08253 |
| **Conjugate** | Phycoerythrin<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 565-605 nm |
| **Formulation** | Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.<br><br>*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. |

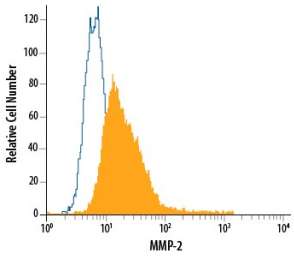
## APPLICATIONS

**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 µL/$10^6$ cells | See Below |

## DATA

**Intracellular Staining by Flow Cytometry**




**Detection of MMP-2 in MG-63 Human Cell Line by Flow Cytometry.** MG-63 human osteosarcoma cell line was stained with Mouse Anti-Human MMP-2 PE-conjugated Monoclonal Antibody (Catalog # IC9023P, filled histogram) or isotype control antibody (Catalog # IC003P, open histogram). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.

## 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.**<br>● 12 months from date of receipt, 2 to 8 °C as supplied. |

## BACKGROUND

Matrix metalloproteinases are a family of zinc and calcium dependent endopeptidases that have a combined ability to degrade all the components of the extracellular matrix. MMP-2 (Gelatinase A), a type IV collagenase, can degrade a broad range of substrates including type IV, V, VII and X collagen, as well as elastin and fibronectin. It is believed to act synergistically with interstitial collagenase (MMP-1) in the degradation of fibrillar collagens as it degrades their denatured gelatin forms. MMP-2 has been shown to be associated with many connective tissue cells, as well as neutrophils, macrophages and monocytes. Structurally, MMP-2 may be divided into several distinct domains: a pro-domain which is cleaved upon activation; a catalytic domain containing the zinc binding site; a fibronectin-like domain thought to play a role in substrate targeting; and a carboxyl terminal (hemopexin-like) domain containing 2 N-linked glycosylation sites.



bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449