

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 Accession # P08253
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 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.

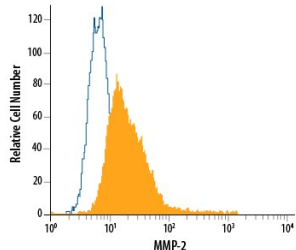
APPLICATIONS

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 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. <ul style="list-style-type: none"> 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.