Human MMP-2 Antibody
Monoclonal Mouse IgG1, Clone # 36006
Catalog Number: MAB902

DESCRIPTION

Species Reactivity  Human
Specificity  Detects pro/active forms of human MMP-2 in Western blots. In Western blots, no cross-reactivity with recombinant human (rh) MMP-9, rhMMP-1, or rhMMP-3 is observed.
Source  Monoclonal Mouse IgG1 Clone # 36006
Purification  Protein A or G purified from hybridoma culture supernatant
Immunogen  Chinese hamster ovary cell line CHO-derived recombinant human MMP-2
Formulation  Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

APPLIEDS
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
Western Blot  1 µg/mL  Recombinant Human MMP-2 Western Blot Standard (Catalog # WBC025) under non-reducing conditions only
Immunohistochemistry  50-100 µg/mL  See Below

DATA

Immunohistochemistry  MMP-2 in Human Ovarian Cancer Tissue. MMP-2 was detected in immersion fixed paraffin-embedded sections of human ovarian cancer tissue using Mouse Anti-Human MMP-2 Monoclonal Antibody (Catalog # MAB902) at 10 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

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.
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
Matrix metalloproteinases are a family of zinc and calcium dependent endopeptidases with the 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 collagens 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.