

DESCRIPTION

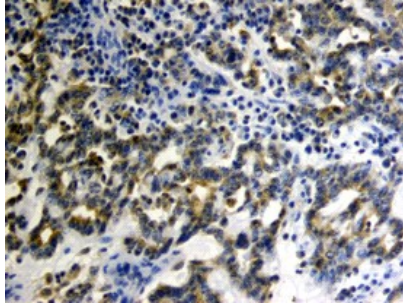
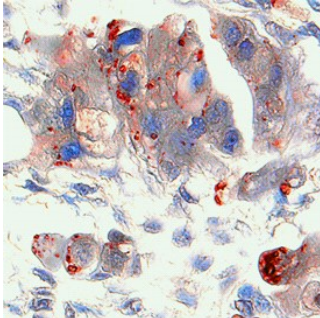
| | |
|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects pro/active forms of human MMP-2 in Western blots. In Western blots, no cross-reactivity with recombinant human (rh) MMP-9, rhMMP-1, or rhMMP-3 is observed. |
| Source | Monoclonal Mouse IgG ₁ Clone # 36006 |
| Purification | Protein A or G purified from ascites |
| 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. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

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 |
|-----------------------------|---------------------------|--|
| Western Blot | 1 µg/mL | Recombinant Human MMP-2 Western Blot Standard (Catalog # WBC025) under non-reducing conditions only |
| Immunohistochemistry | 8-25 µg/mL | See Below |

DATA

| | |
|--|---|
| <p>Immunohistochemistry</p>  <p>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.</p> | <p>Immunohistochemistry</p>  <p>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 15 µg/mL overnight at 4 °C. Tissue was stained (red) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p> |
|--|---|

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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | <p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 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.