**DESCRIPTION**

**Species Reactivity**  
Human

**Specificity**  
Detects the pro and active forms of human MMP-3 in Western blots. In Western blots, no cross-reactivity with recombinant human (rh) MMP-1, rhMMP-2 or rhMMP-9 is observed.

**Source**  
Monoclonal Mouse IgG1 Clone # 10D6

**Purification**  
Protein A or G purified from hybridoma culture supernatant

**Immunogen**  
Chinese hamster ovary cell line CHO-derived recombinant human MMP-3

**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 either lyophilized or 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.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommended Concentration</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Blot</td>
<td>1 μg/mL</td>
<td>Recombinant Human MMP-3 Western Blot Standard (Catalog # WBC015)</td>
</tr>
<tr>
<td>Immunohistochemistry</td>
<td>8-25 μg/mL</td>
<td>See Below</td>
</tr>
<tr>
<td>Immunoprecipitation</td>
<td>25 μg/mL</td>
<td>Conditioned cell culture medium spiked with Recombinant Human MMP-3 (Catalog # 513-MP), see our available Western blot detection antibodies</td>
</tr>
</tbody>
</table>

**DATA**

**Immunohistochemistry**  
MMP-3 in Human Ovarian Cancer Tissue. MMP-3 was detected in immersion fixed paraffin-embedded sections of human ovarian cancer tissue using 25 μg/mL Mouse Anti-Human MMP-3 Monoclonal Antibody (Catalog # MAB905) overnight at 4 °C. Tissue was stained with the Anti-Mouse HRP-AEC Cell & Tissue Staining Kit (red; Catalog # C15003) 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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

**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-3 (stromelysin-1), can degrade a broad range of substrates including collagen chains, aggrecan, laminin, fibronectin, elastin, casein, α1-antitrypsin, myelin basic protein, IL-1β, IGFBP-3, pro MMP-1, pro MMP-7, pro MMP-8, pro MMP-9 and pro MMP-13. MMP-3 does not cleave the triple helical region of interstitial collagens, a characteristic which distinguishes the stromelysins from the collagenases. The MMP-3 substrate repertoire extends beyond extracellular matrix proteins and implicates MMP-3 in roles other than direct tissue remodelling, for instance, enzyme cascades and cytokine regulation. MMP-3 is expressed by fibroblasts, chondrocytes, osteoblasts, endothelial cells, smooth muscle cells and macrophages. Structurally, MMP-3 may be divided into several distinct domains; a pro-domain which is cleaved upon activation; a catalytic domain containing the zinc binding site; a short hinge region and a carboxy terminal (hemopexin-like) domain.