**Species Reactivity**
Human

**Specificity**
Detects the pro and active forms of human MMP-8 in Western blots. Does not cross-react with recombinant human (rh) MMP-1, -2, -3, -7, -9, -10, -12, or -13.

**Source**
Monoclonal Mouse IgG Clone # 100619

**Purification**
Protein A or G purified from ascites

**Immunogen**
Mouse myeloma cell line NS0-derived recombinant human MMP-8 Phe21-Gly467
Accession # AAZ38714

**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**

<table>
<thead>
<tr>
<th>Sample</th>
<th>Western Blot Standard (Catalog # WBC017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration</td>
<td>Recombinant Human MMP-8 (Catalog # WBC017)</td>
</tr>
<tr>
<td><strong>Immunoprecipitation</strong></td>
<td>25 μg/mL</td>
</tr>
<tr>
<td><strong>Human MMP-8 Sandwich Immunoassay</strong></td>
<td>2.0-8.0 μg/mL</td>
</tr>
<tr>
<td><strong>ELISA Capture</strong></td>
<td>Human MMP-8 Antibody (Catalog # MAB908)</td>
</tr>
<tr>
<td><strong>ELISA Detection Standard</strong></td>
<td>Human MMP-8 Biotinylated Antibody (Catalog # BAF908)</td>
</tr>
<tr>
<td><strong>Reagent</strong></td>
<td>Recombinant Human MMP-8 (Catalog # 908-MP)</td>
</tr>
</tbody>
</table>

**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** at 2 to 8 °C under sterile conditions after reconstitution.
  - **6 months** at -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

Matrix metalloproteinases (MMPs) are a family of zinc and calcium dependent endopeptidases with the combined ability to degrade all the components of the extracellular matrix. MMP-8 (neutrophil collagenase) is expressed in neutrophils, where it is stored in specific granules. MMP-8 release from the neutrophils is stimulated by various factors such as interleukins 1 and 8, TNF-α and GM-CSF. MMP-8 is capable of cleaving types I, II and III triple-helical collagen, gelatin peptides, fibronectin, proteoglycans, aggrecan, serpins, β-casein and peptides such as angiotensin and substance P. In addition to its function in phagocytosis, MMP-8 has a high capacity for infiltrating connective tissue, and is implicated in the breakdown of the extracellular matrix in diseases such as rheumatoid arthritis.

Structurally, MMP-8 consists of several domains: a pro-domain that is cleaved upon activation, a catalytic domain containing the zinc-binding site, a short hinge region and a hemopexin-like domain. MMP-8 is heavily glycosylated.