### Description

**Species Reactivity**  
Human

**Specificity**  
Detects human MMP-13 in Western blots. In this format, approximately 5% cross-reactivity with recombinant human (rh) MMP-8 is observed and less than 2% cross-reactivity with rhMMP-1, -2, -3, -7, -9, and -12 is observed.

**Source**  
Polyclonal Goat IgG

**Purification**  
Antigen Affinity-purified

**Immunogen**  
Mouse myeloma cell line NS0-derived recombinant human MMP-13 (R&D Systems, Catalog # 511-MM)  
Leu20-Cys471  
Accession #: P45452

**Formulation**  
Lyophilized from a 0.2 μm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

### 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>
</tr>
</thead>
<tbody>
<tr>
<td>Recombinant Human MMP-13 (Catalog # 511-MM)</td>
<td>0.1 μg/mL</td>
</tr>
</tbody>
</table>

### Preparation and Storage

**Reconstitution**  
Reconstitute at 0.2 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-13 (Collagenase-3) has been demonstrated to degrade a range of extracellular matrix proteins, including collagen types I, II, III, IV, IX, X and XIV, gelatin, aggrecan, perlecan and fibronectin. MMP-13 is distinguished from the other human collagenses by its efficient degradation of type II collagen. MMP-13 is expressed by fibroblasts, chondrocytes and squamous epithelial cells. Structurally, MMP-13 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 carboxyl terminal (hemopexin-like) domain.

### References