

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human MMP-8 in ELISAs and Western blots. In sandwich immunoassays, less than 0.1% cross-reactivity with recombinant human (rh) rhMMP-1, rhMMP-2, rhMMP-9, rhMMP-13, rhMMP-7, rhMMP-10 and rhMMP-12 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human MMP-8 Phe21-Gly467 Accession # AAZ38714
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

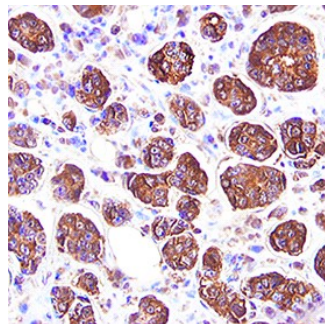
## APPLICATIONS

**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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human MMP-8 (Catalog # 908-MP)
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>Human MMP-8 Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 µg/mL	Human MMP-8 Antibody (Catalog # MAB908)
<b>ELISA Detection</b>	0.1-0.4 µg/mL	Human MMP-8 Biotinylated Antibody (Catalog # BAF908)
<b>Standard</b>		Recombinant Human MMP-8 (Catalog # 908-MP)

## DATA

### Immunohistochemistry



**MMP-8 in Human Breast Cancer Tissue.**  
MMP-8 was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Goat Anti-Human MMP-8 Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF908) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in ductal cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.