

DESCRIPTION

Species Reactivity	Human
Specificity	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.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
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 BSA as a carrier protein. See Certificate of Analysis for details.

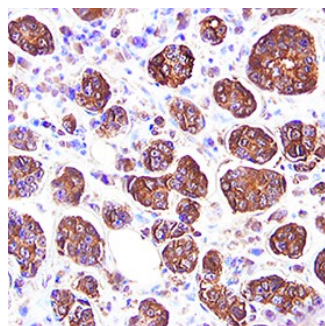
APPLICATIONS

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

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	<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 (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.