

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human MMP-10 in Western blots. In Western blots, approximately 10% cross-reactivity with recombinant human (rh) MMP-3 and rhMMP-7 is observed under non-reducing conditions. Approximately 10% and 2% cross-reactivity with rhMMP-3 and rhMMP-2 is observed under reducing conditions, respectively. Additionally, less than 1% cross-reactivity with rhMMP-1, -8, -9, -12, -13, and recombinant mouse MMP-9 is observed under reducing and non-reducing conditions.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human MMP-10 (R&D Systems, Catalog # 910-MP) Tyr18-Cys476 Accession # P09238
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

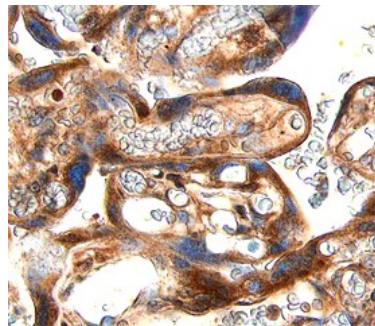
## APPLICATIONS

**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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human MMP-10 Western Blot Standard (Catalog # <a href="#">WBC026</a> )
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human MMP-10 (Catalog # <a href="#">910-MP</a> ), see our available <a href="#">Western blot detection antibodies</a>

## DATA

### Immunohistochemistry



**MMP-10 in Human Placenta.** MMP-10 was detected in immersion fixed paraffin-embedded sections of human placenta using Human MMP-10 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF910) at 5 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). 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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <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 are a family of zinc and calcium dependent endopeptidases with the combined ability to degrade all the components of the extracellular matrix. MMP-10 (stromelysin 2) degrades a broad range of substrates including gelatin, collagen types III, IV and V, fibronectin, aggrecan, and pig cartilage proteoglycan. MMP-10 can activate other MMPs such as MMP-1 and MMP-8. MMP-10 is expressed in keratinocytes, T cells, menstrual endometrium, and a few tumor samples. Structurally, MMP-10 may be divided into four distinct domains: a pro-domain which is cleaved upon activation, a catalytic domain containing the zinc binding site, a short linker region, and a carboxyl terminal hemopexin-like domain.