

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects the pro and active forms of human MMP-10 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human MMP-1, -2, -3, -7, -8, -9, -12, or -13 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 117239
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human MMP-10 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	Recombinant Human MMP-10 Western Blot Standard (Catalog # <a href="#">WBC026</a> )
<b>Immunohistochemistry</b>	8-25 µg/mL	Immersion fixed paraffin-embedded sections of human intestine
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human MMP-10 (Catalog # <a href="#">910-MP</a> ), <a href="#">see our available Western blot detection antibodies</a>
<b>Neutralization</b>		Measured by its ability to neutralize Recombinant Human MMP-10 (1 µg/mL, Catalog # <a href="#">910-MP</a> ) cleavage of the fluorogenic peptide substrate Mca-RPKPVE-Nval-WRK(Dnp)-NH <sub>2</sub> (10 µM, Catalog # <a href="#">ES002</a> ). The Neutralization Dose (ND <sub>50</sub> ) is typically 1 µg/mL.

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 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.