

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Pro MMP-13 in direct ELISAs and Western blots. Does not detect active recombinant human MMP-13. In Western blots, no cross-reactivity with recombinant human MMP-1, -2, -3, -7, -8, -9, -10, or -12 is observed.                                              |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 87518                                                                                                                                                                                                                            |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | Chinese hamster ovary cell line CHO-derived recombinant human MMP-13<br>Leu20-Cys471<br>Accession # P45452                                                                                                                                                                  |
| <b>Conjugate</b>          | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## 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>Western Blot</b>                | Optimal dilution of this antibody should be experimentally determined. |
| <b>ELISA</b>                       | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunoaffinity Purification</b> | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunoprecipitation</b>         | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## 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 collagenases 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.

## PRODUCT SPECIFIC NOTICES

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