

DESCRIPTION

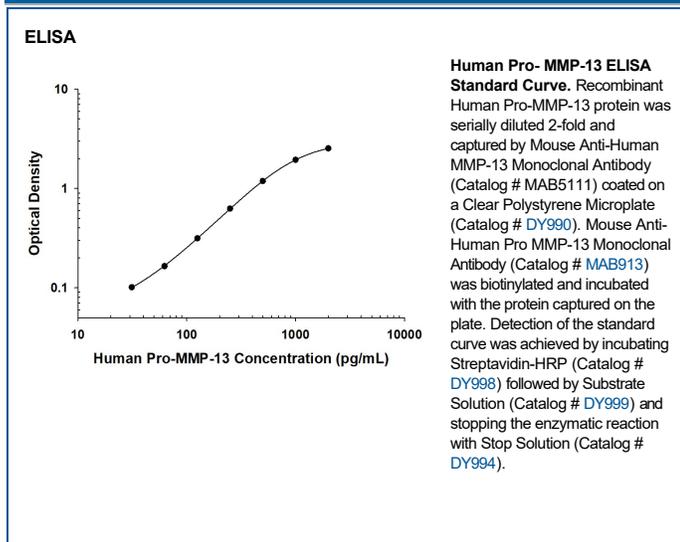
Species Reactivity	Human
Specificity	Detects human MMP-13 in direct ELISAs. In a sandwich immunoassay, detects human pro-MMP-13 when paired with an anti-human pro-MMP-13 detection antibody.
Source	Monoclonal Mouse IgG ₁ Clone # 87511
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human MMP-13 Leu20-Cys471 Accession # P45452
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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.

ELISA	This antibody functions as Pro-MMP-13 ELISA capture antibody when paired with Mouse Anti-Human Pro-MMP-13 Monoclonal Antibody (Catalog # MAB913). <i>This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Human Pro-MMP-13 DuoSet ELISA Kit (Catalog # DY913) for convenient development of a sandwich ELISA or the Human Pro-MMP-13 Quantikine ELISA Kit (Catalog # DM1300) for a complete optimized ELISA.</i>
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DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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 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.

References:

1. Jeffery, J.J. (1998) in *Collagenase 3*. A.J. Barrett, *et al.* (eds): Handbook of Proteolytic Enzymes, San Diego: Academic Press, p. 1167.