

## Human MMP13 ELISA Kit | MMP13 elisa kit

Human MMP13 PicoKine ELISA Kit

 CATALOG #  
**AAA45360**

 REACTIVITY  
**Human**

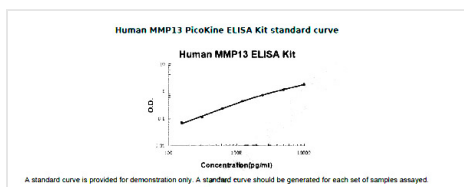
### PRODUCT SYNONYMS

MMP13; Human MMP13 PicoKine ELISA Kit; Collagenase 3; matrix metalloproteinase 13 (collagenase 3); CLG 3; CLG3; Collagenase3; MANDP1; Matrix metalloproteinase 13; Matrix metalloproteinase-13; MMP 13; MMP-13; Mmp13; MMP13\_HUMAN; UMRCASE; MMP13 elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                       |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity              | Human                                                                                                                                                 |
| Specificity             | Natural and recombinant Human MMP13                                                                                                                   |
| Sequence Length         | 471                                                                                                                                                   |
| Samples                 | Cell culture supernatants, serum and plasma (heparin)                                                                                                 |
| Detection Range         | 156 pg/ml - 10,000 pg/ml                                                                                                                              |
| Sensitivity             | <5 pg/ml                                                                                                                                              |
| Intra-assay Precision   | Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.     |
| Inter-assay Precision   | Inter-Assay Precision (Precision across assays): Three samples of known concentration were tested in separate assays to assess inter-assay precision. |
| Preparation and Storage | Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles (Shipped with wet ice.)                            |

### IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for MMP13 elisa kit | <p>Principle of the Assay: The Picokine™ Human MMP13 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid-phase immunoassay specially designed to measure Human MMP13 with a 96-well strip plate that is pre-coated with antibody specific for MMP13. The detection antibody is a biotinylated antibody specific for MMP13. The capture antibody is monoclonal antibody from mouse and the detection antibody is polyclonal antibody from goat. The kit contains recombinant Human MMP13 with immunogen: Expression system for standard: NS0; Immunogen sequence: L20-C471. The kit is analytically validated with ready-to-use reagents. To measure Human MMP13, add standards and samples to the wells, then add the biotinylated detection antibody. Wash the wells with PBS or TBS buffer, and add Avidin-Biotin-Peroxidase Complex (ABC-HRP). Wash away the unbounded ABC-HRP with PBS or TBS buffer and add TMB. TMB is an HRP substrate and will be catalyzed to produce a blue color product, which changes into yellow after adding the acidic stop solution. The absorbance of the yellow product at 450nm is linearly proportional to Human MMP13 in the sample. Read the absorbance of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human MMP13 in the sample.</p> <p>Background/Introduction: Collagenase 3 is an enzyme that in humans is encoded by the MMP13 gene. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. The protein encoded by this gene cleaves type II collagen more efficiently than types I and III. The expression of MMP13 in osteoarthritic cartilage and its activity against type II collagen indicates that the enzyme plays a significant role in cartilage collagen degradation and must, therefore, form part of a complex target for proposed therapeutic interventions based on collagenase inhibition. It may be involved in articular cartilage turnover and cartilage pathophysiology associated with osteoarthritis. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3.</p> |
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NCBI AND UNIPROT INFORMATION

|                                  |                                                            |
|----------------------------------|------------------------------------------------------------|
| NCBI GeneID                      | 4322                                                       |
| UniProt Accession #              | A8K846; Q6NWN6; B2RCZ3; P45452                             |
| Molecular Weight                 | 53,820 Da                                                  |
| NCBI Official Synonym Full Names | matrix metallopeptidase 13 (collagenase 3)                 |
| NCBI Official Symbol             | MMP13                                                      |
| NCBI Official Synonym Symbols    | CLG3; MANDP1; MMP-13                                       |
| NCBI Protein Information         | collagenase 3; matrix metalloproteinase 13 (collagenase 3) |
| UniProt Protein Name             | Collagenase 3                                              |
| UniProt Gene Name                | MMP13                                                      |
| UniProt Synonym Gene Names       | MMP-13                                                     |
| UniProt Entry Name               | MMP13_HUMAN                                                |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/human-elisa-kits/mmp13/45360>