

## Rat Matrix metalloproteinase 13 (MMP-13) ELISA Kit

Catalog No: #EK11219



Package Size: #EK11219-1 48T #EK11219-2 96T

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

Product Name	Rat Matrix metalloproteinase 13 (MMP-13) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat ( <i>Rattus norvegicus</i> )
Other Names	CLG3; MANDP1; collagenase 3 matrix metalloproteinase 13 matrix metalloproteinase 13 (collagenase 3)
Accession No.	O62806
Uniprot	O62806
GeneID	100008685;
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

## Application Details

Detect Range:0.156-10 ng/mL

Sensitivity:0.064 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

**Detection Method:**SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate MMP13 in samples. An antibody specific for MMP13 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyMMP13 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for MMP13 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of MMP13 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**MMP-13 has been proposed to participate in aggrecan degradation associated with osteoarthritis and cleavage of type II collagen in osteoarthritic cartilage explants and in tumor progression and metastasis . In addition, it can cleave type I, III, IV, IX, X and XIV collagens and fibronectin. MMP-13 is likely to play a crucial role in the modulation of extracellular matrix degradation and cell-matrix interactions .MMP-13 is expressed by several metastatic tumors including breast carcinomas, chondrosarcomas, head and neck carcinomas, and in degenerative bone diseases including rheumatoid arthritis. Wild type and mutant p53, a tumor suppressor gene, differentially regulate MMP-13 gene expression . Members of the activator protein-1 and core-binding factor families increase MMP-13 promoter activity in normal, differentiating osteoblasts .

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Note: This product is for in vitro research use only