

ARG82075
Rat MMP1 ELISA Kit

Package: 96 wells

Store at: 4°C

Summary

Product Description	ARG82075 Rat MMP1 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Rat MMP1 in serum, plasma and cell culture supernatants.
Tested Reactivity	Rat
Tested Application	ELISA
Specificity	The following recombinant Rat proteins were tested and exhibited no cross-reactivity or interference: Adiponectin, ApoAI, BMP7, CCL2, CRP, FGF acidic, HGF, HSP27, IGF1, IL1 alpha, IFN alpha, IFN beta, IFN gamma, MMP2, MMP3, MMP9, PDGF, PLA2G7, prolactin, TLR4, TGF beta 1, TNF alpha, TNF RI, TNF RII, VEGF proteins.
Target Name	MMP1
Conjugation	HRP
Conjugation Note	Read at 450 nm.
Sensitivity	18 pg/ml
Sample Type	Serum, plasma and cell culture supernatants.
Standard Range	93 - 6000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 5%; Inter-Assay CV: 10%
Alternate Names	MMP-1; CLG; Fibroblast collagenase; Matrix metalloproteinase-1; CLGN; EC 3.4.24.7; Interstitial collagenase

Application Instructions

Assay Time	~ 3 hours
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Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	MMP1
Gene Full Name	matrix metalloproteinase 1
Background	Proteins of the matrix metalloproteinase (MMP) family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue

remodeling, as well as in disease processes, such as arthritis and metastasis. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. This gene encodes a secreted enzyme which breaks down the interstitial collagens, types I, II, and III. The gene is part of a cluster of MMP genes which localize to chromosome 11q22.3. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Mar 2009]

Function

Cleaves collagens of types I, II, and III at one site in the helical domain. Also cleaves collagens of types VII and X. In case of HIV infection, interacts and cleaves the secreted viral Tat protein, leading to a decrease in neuronal Tat's mediated neurotoxicity. [UniProt]

Highlight

Related products:
[MMP1 antibodies](#); [MMP1 ELISA Kits](#);
Related news:
[Detecting MMPs and their non-ECM substrates](#)
New ELISA data calculation tool:
[Simplify the ELISA analysis by GainData](#)

PTM

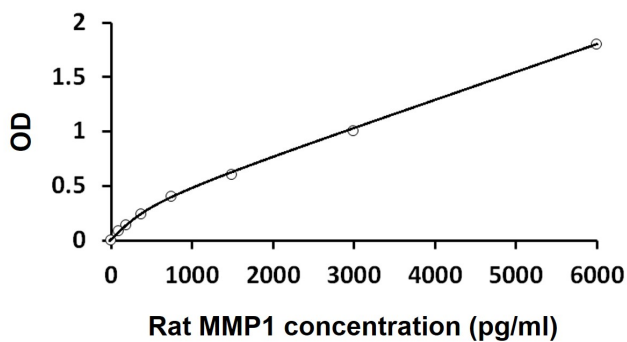
Undergoes autolytic cleavage to two major forms (22 kDa and 27 kDa). A minor form (25 kDa) is the glycosylated form of the 22 kDa form. The 27 kDa form has no activity while the 22/25 kDa form can act as activator for collagenase.

Tyrosine phosphorylated in platelets by PKDCC/VLK. [UniProt]

Cellular Localization

Secreted, extracellular space, extracellular matrix. [UniProt]

Images



ARG82075 Rat MMP1 ELISA Kit standard curve image

ARG82075 Rat MMP1 ELISA Kit results of a typical standard run with optical density reading at 450 nm.