

Product datasheet

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ARG21506 anti-MMP1 antibody [SB12e]

Package: 50 μg Store at: -20°C

Summary

Product Description Mouse Monoclonal antibody [SB12e] recognizes MMP1

Tested Reactivity Hu, Rb

Tested Application ELISA, ICC/IF, IHC-Fr, IHC-P, WB

Specificity Human/Rabbit MMP1.

Host Mouse

Clonality Monoclonal

Clone SB12e

Isotype IgG2b, kappa

Target Name MMP1
Species Human

Immunogen Recombinant full length MMP-1

Conjugation Un-conjugated

Alternate Names MMP-1; CLG; Fibroblast collagenase; Matrix metalloproteinase-1; CLGN; EC 3.4.24.7; Interstitial

collagenase

Application Instructions

| Application table | Application | Dilution |
|-------------------|--|-----------------|
| | ELISA | < 2 μg/ml |
| | ICC/IF | Assay-dependent |
| | IHC-Fr | Assay-dependent |
| | IHC-P | Assay-dependent |
| | WB | Assay-dependent |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |

Properties

| Form | Liquid | |
|---------------------|--|--|
| Buffer | BBS (pH 8.2) | |
| Concentration | 0.5 mg/ml | |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use | |

Bioinformation

Database links GeneID: 100009110 Rabbit

GeneID: 4312 Human

Swiss-port # P03956 Human

Swiss-port # P13943 Rabbit

Gene Symbol MMP1

Gene Full Name matrix metallopeptidase 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]

Calculated Mw 54 kDa

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.

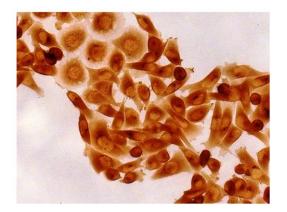
Tyrosine phosphorylated in platelets by PKDCC/VLK.

Images



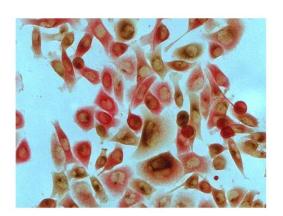
ARG21506 anti-MMP-1 antibody [SB12e] WB image

Western blot: 20 μg of HeLa cell lysates stained with ARG21506 anti-MMP-1 antibody [SB12e] at 1:500 dilution.



ARG21506 anti-MMP1 antibody [SB12e] ICC image

Immunocytochemistry: Human pancreatic carcinoma cell line MIA PaCa-2 stained with ARG21506 anti-MMP1 antibody [SB12e], followed by <u>ARG21894</u> Goat anti-Mouse IgG2b antibody (HRP) (preadsorbed), DAB and mounted with Fluoromount-G.



ARG21506 anti-MMP1 antibody [SB12e] ICC image

Immunocytochemistry: Human pancreatic carcinoma cell line MIA PaCa-2 stained with <u>ARG22307</u> anti-Cytokeratin 8 antibody [SB37b] and ARG21506 anti-MMP1 antibody [SB12e] followed by <u>ARG23804</u> Goat anti-Mouse IgG2a antibody (AP) (pre-adsorbed) and <u>ARG21894</u> Goat anti-Mouse IgG2b antibody (HRP) (pre-adsorbed), Red AP, DAB and mounted with Fluoromount-G.