

Human MMP-9 Antibody

Polyclonal Antibody

Product Information

Product No.: M1303
RRID: AB_2831298
Storage: -20° to -70°C

Product Description

Specificity:

Goat Anti-Human Matrix Metalloproteinase-9 (MMP-9) recognizes Human MMP-9. This antigen affinity purified polyclonal antibody was purified using a proprietary chromatographic technique that includes covalently immobilizing the antigen proteins or peptides to agarose based beads. This purification method enhances specificity, reduces nonspecific binding of extraneous IgG and provides you with the most reliable reagent available for your early discovery research.

Background:

Matrix metalloproteinase 9, also known as MMP9, is a biological enzyme that is a member of the matrix metalloproteinases (MMPs). MMP9 is thought to play a critical role in tumor cell invasion,¹ 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. MMP-9 is secreted from cells and, once activated, is thought to degrade collagen in the extracellular matrix.² MMP-9 is one of the major proteases produced by osteoclasts and possibly plays a role in osteoclastic bone resorption.³

Known Reactivity Species:

Human

Format:

Antigen Affinity Purified

Immunogen:

CHO-Derived Recombinant Human MMP-9

Formulation

This antigen affinity purified polyclonal antibody has been 0.2 µm filtered and lyophilized from modified Dulbecco's phosphate buffered saline (1X PBS) pH 7.2 – 7.4 containing 5.0% w/v trehalose with no calcium, magnesium, or preservatives present.

Storage and Stability

The lyophilized antigen affinity purified polyclonal antibody can be stored desiccated at -20°C to -70°C for twelve months from date of receipt. The reconstituted antibody can be stored for at least four weeks at 2-8°C. For long-term storage of the reconstituted antibody, aseptically aliquot into working volumes and store at -20°C to -70°C in a manual defrost freezer.

Avoid Repeated Freeze Thaw Cycles. No detectable loss of activity was observed after six months.

Applications

Applications and Recommended Usage (Quality Tested By Leinco):

Western Blotting: To detect Human MMP-9 this polyclonal antibody can be used at a concentration of 0.1 µg/ml. This polyclonal antibody should be used in conjunction with compatible second-step reagents such as PN:G505 and a

chromogenic substrate such as PN:T343. The detection limit for Human MMP-9 is 5 ng/lane under either reducing or non-reducing conditions. The sensitivity of detection may increase up to 50 fold when a chemiluminescent substrate is used.

Other Applications Reported in Literature:

Immunocytochemistry: This antibody can be used at concentration of 5-15 µg/mL.

Immunoprecipitation: Suitable for use at concentration of 25 µg/mL.

Immunohistochemistry: Suitable for use at concentration of 5-15 µg/mL.

Country of Origin

USA

References

- 1) Viswanadha, VP. et al. (2017) J Cell Biochem. 118(9):2865-2876.
- 2) Mobashery, S. et al. (1995) Cancer Res. 55: 2548
- 3) Tökés, ZA. et al. (1995) J Neurochem. 64: 1312
- 4) Kumegawa, M. et al. (1994) J Biol. Chem. 269: 15006