

Store at
-20C
#54376**MMP-1 (E9S9N) Rabbit mAb**

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP, IHC-P, IF-IC	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 55	Source/Isotype: Rabbit IgG	UniProt ID: #P03956	Entrez-Gene Id: 4312
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Product Usage Information**Application**

Western Blotting
Immunoprecipitation
Immunohistochemistry (Paraffin)
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:100
1:100 - 1:400
1:400 - 1:1600

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #87303.

Specificity/Sensitivity

MMP-1 (E9S9N) Rabbit mAb recognizes endogenous levels of total MMP-1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val267 of human MMP-1 protein.

Background

The matrix metalloproteinase (MMP) family of proteases is a group of zinc-dependent enzymes that target extracellular proteins, including growth factors, cell surface receptors, adhesion molecules, matrix structural proteins, and other proteases (1,2). Within this family, MMP-1, MMP-8, and MMP-13 have been characterized as a collagenase subfamily of MMPs targeting fibrillar collagen (collagen type I, II, and III) for degradation. In addition to collagen, MMP-1 also has activity toward a broad array of other ECM proteins, such as fibronectin, gelatin, aggrecan (etc.), as well as growth factors, chemokines, and cytokines (3). MMP-1 is widely involved in tissue remodeling during wound healing, tumor growth, invasion and metastasis, and arthritis (4-6).

Background References

1. Löffek, S. et al. (2011) *Eur Respir J* 38, 191-208.
2. Nagase, H. et al. (2006) *Cardiovasc Res* 69, 562-73.
3. Foley, C.J. and Kuliopulos, A. (2014) *J Cell Physiol* 229, 1875-80.
4. Ala-aho, R. and Kähäri, V.M. (2005) *Biochimie* 87, 273-86.
5. Rohani, M.G. and Parks, W.C. (2015) *Matrix Biol* 44-46, 113-21.
6. Burrage, P.S. et al. (2006) *Front Biosci* 11, 529-43.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: Human

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