

#3852 Store at -20C

MMP-9 Antibody



Cell Signaling
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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H	Endogenous	84, 92	Rabbit	#P14780	4318

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

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

Specificity / Sensitivity

MMP-9 Antibody detects full length (proenzyme, 92 kDa) and cleaved (active enzyme, 84 kDa) MMP-9.

Species predicted to react based on 100% sequence homology:

Rat

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Lys115 of human MMP-9. Antibodies are purified by protein A and peptide affinity chromatography.

Background

The matrix metalloproteinases (MMPs) are a family of proteases that target many extracellular proteins including other proteases, growth factors, cell surface receptors, and adhesion molecules (1). Among the family members, MMP-2, MMP-3, MMP-7, and MMP-9 have been characterized as important factors for normal tissue remodeling during embryonic development, wound healing, tumor invasion, angiogenesis, carcinogenesis, and apoptosis (2-4). Research studies have shown that MMP activity correlates with cancer development (2). One mechanism of MMP regulation is transcriptional (5). Once synthesized, MMP exists as a latent proenzyme. Maximum MMP activity requires proteolytic cleavage to generate active MMPs by releasing the inhibitory propeptide domain from the full-length protein (5).

Background References

- McCawley, L.J. and Matrisian, L.M. (2001) *Curr Opin Cell Biol* 13, 534-40.
- Coussens, L.M. et al. (2002) *Science* 295, 2387-92.
- Sternlicht, M.D. et al. (1999) *Cell* 98, 137-46.
- Vu, T.H. et al. (1998) *Cell* 93, 411-22.
- Nagase, H. et al. (1990) *Biochemistry* 29, 5783-9.

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

WB: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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