

#87809 Store at -20°C

**MMP-2 (D2O4T) Rabbit mAb****Cell Signaling**  
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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, W-S, IP	H M	Endogenous	64,72	Rabbit IgG	#P08253	4313

**Product Usage Information****Application**Western Blotting  
Simple Western™  
Immunoprecipitation**Dilution**1:1000  
1:10 - 1:50  
1:100**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.

**Specificity / Sensitivity**

MMP-2 (D2O4T) Rabbit mAb recognizes endogenous levels of total MMP-2 protein.

**Species predicted to react based on 100% sequence homology:**

Rat

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro117 of human MMP-2 protein.

**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**

1. McCawley, L.J. and Matrisian, L.M. (2001) *Curr Opin Cell Biol* 13, 534-40.
2. Coussens, L.M. et al. (2002) *Science* 295, 2387-92.
3. Sternlicht, M.D. et al. (1999) *Cell* 98, 137-46.
4. Vu, T.H. et al. (1998) *Cell* 93, 411-22.
5. 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 **W-S:** Simple Western™ **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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