



MMP-2 (72kDa Collagenase IV) Ab-1 (Clone CA-4001)

Mouse Monoclonal Antibody

Cat. #DLN-09926, DLN-09927, or DLN-09925 (0.1ml, 0.5ml, or 1ml at 200µg/ml) (Purified Ab with BSA and Azide)

Cat. #DLN-09928 or DLN-09929 (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)

Cat. #DLN-09923, DLN-09924, or DLN-08822 (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Biotin-Labeled Ab with BSA and Azide)

Description: MMPs are proteolytic enzymes capable of degrading connective tissue components. They have a common mode of activation, a conserved amino acid sequence in the putative metal binding-active site region, and are inhibited by specific tissue inhibitors of metalloproteinases (TIMPs). MMPs and TIMPs play a significant role in regulating angiogenesis. MMP-2; also known as 72kDa collagenase IV or gelatinase A is synthesized as a 631 amino acid proenzyme which is activated by cleavage of the first 80 amino acids into an active form of 62kDa.

Comments: Ab-1 reacts with only the proform of MMP-2 and shows no cross-reaction with pro and active forms of MMP-9.¹ Ab-1 is recommended for staining of formalin fixed paraffin embedded murine tissues.

Mol. Wt. of Antigen: 72kDa (pro form)

Epitope: N-terminal (APSPIIKFPGD-VAPKTDK)

Species Reactivity: Human, Mouse, and Rat. Others-not known.

Clone Designation: CA-4001 (or CA719E3C)

Ig Isotype: IgG₁

Immunogen: N-terminal peptide APSPIIKFPGD-VAPKTDK of procollagenase IV.¹

Applications and Suggested Dilutions:

- Inhibition of MMP-2 Activity (2-4µg/ml⁷)
(Order Ab without sodium azide)
- Immunoprecipitation⁶ (Not suitable)
- Western Blotting¹ (0.5-1.0µg/ml for 2hrs at RT)

The optimal dilution for a specific application should be determined by the investigator.

Cellular Localization: Cytoplasmic

Positive Control: Conditioned, serum-free medium from (TPA-treated) HFL-1 cells. Placenta.

Supplied As:

200µg/ml of antibody purified from ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml.



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Storage and Stability:

Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Key References:

1. Margulies IM, *et. al.* Cancer Epidemiology, Biomarkers and Prevention, 1992, 1(6):467-74.
2. Soini Y, *et. al.* J Histochem Cytochem, 1994, 42:945-51.
3. Autio-Harmanen H, *et al.* Lab Invest, 1993, 69:312-321.
4. Autio-Harmanen H, *et al.* Lab Invest, 1992, 67:191-200.
5. Nikkari S T, *et al.* Am J Pathol, 1996, 149:1427-1433.
6. Fridman R, *et al.* J Biol Chem, 1992, 267:15398-15405.
7. Schnaper H W, *et al.* J Cell Physiol, 1993, 156:235-246.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. Dianova is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

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